

AMERICAN BEE JOURNAL



JANUARY

1958

**Volume 98
Number 1**



YORK'S

Italians

Starlines

and

MIDNITES

FUMIDIL FED

for 1958 Quality Bred

The Strains Preferred by Leading Honey Producers

It's time now to plan for quality packages for quality honey in 1958. Greater demand for April shipping dates makes early planning and ordering necessary.

Supersedure your problem? Order for delivery larger packages for arrival later than usual. Also realize that York's Queens are Fumadil fed during critical periods to assure fast build-up.

Help us to help you

ORDER TODAY

MARCH - 1958

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APRIL - 1958

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

MAY - 1958

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Want to pick up your bees? Truck loading facilities are among the best with daily volume high enough to avoid package holdover. Shipments also by express and parcel post.

Air freight shipments are possible if you can pick your bees from large air terminals. Write us for further information.

MIDNITES — the new Caucasian hybrid strain available here during their first year of commercial production. Orders are already being booked for most of the more desirable dates. Be among the first to give this bee a trial in your area. Production and gentleness promise to be unsurpassed.

Packages with Italian queens

Quantity	1-24	25-99	100 up
2 lb. -----	\$4.50	\$4.25	\$4.00
3 lb. -----	5.70	5.45	5.20
4 lb. -----	6.90	6.65	6.40
5 lb. -----	8.10	7.85	7.60
Extra Queens			
Italian	1.45	1.35	1.25

Packages with Starline or Midnite Queens

Quantity	1-24	25-99	100 up
2 lb. -----	\$4.80	\$4.55	\$4.30
3 lb. -----	6.00	5.75	5.50
4 lb. -----	7.20	6.95	6.70
5 lb. -----	8.40	8.15	7.90
Extra Queens — Starline or Midnite	1.75	1.65	1.55

Queenless packages — deduct \$1.00 per package; Tested Queens—add \$1.00 per package or queen.

Terms: Small orders cash, larger orders \$1.00 deposit per package and balance two weeks prior to shipping date.

Shipments start first of April depending upon spring weather conditions.

YORK BEE COMPANY

Jesup, Georgia



(The Universal Apiaries)

412 W. Orange Street

P. O. Box 300

Phone Garden 7-4131



- Our Cover Picture -

Who Is It?

Pat begins a cover contest with this issue. She also has a Scrambled Picture puzzle, beginning on page 33 and the explanation about it is on that page. The object of both contests is to test your acquaintance with some of the leaders in beekeeping. The cover contest is relatively simple and its keynote is in the question "Who Is It?" If you know who the person is on this January cover and you are certain about it, write a short account of his or her achievements not to exceed a single page typewritten account, with double spacing (a blank line between each typed line). Three pen or pencil written note pages will be about equal in length for your story in comparison with the typed pages. Try to get as full an account of what you know about the person into that space as you can.

When the contest stories are received the best will be sent to Pat who will judge the accounts by the knowledge displayed, the estimate of value of the individual and what other basis for judging she may care to use. Contest stories should be addressed "American Bee Journal, Hamilton, Illinois, Cover Contest Editor." Mail them early enough so they get here before the 15th of the month.

The best story will be honored with a cash payment of five dollars and a full three year subscription to the Journal; the second best will receive a two year subscription; the third, a one year subscription; the next four, one of our books to be chosen from a book list which will be sent to the winners for selection. So, let's get going. The value of the manuscript is the only measure of your success.



OUR CONTEST EDITOR, Pat Diehnelt, wife of Walter Diehnelt, Jr., of Menomonie Falls, Wisconsin. She has an M.S. degree from the University of Michigan.

"Bee Wise — Woodmanise Your Bee Supplies"

A. G. Woodman Co.

Grand Rapids 4, Mich.

(Send for catalog—350 Listings)

BEES QUEENS

Three-banded Italian bees and KELLEY'S ISLAND 3-banded Italian queens direct from our own Bee farm. Shipments start April 1st — express or parcel post shipment. Thousands of extra queens.



	Queens	2 lb. w/q	3 lb. w/q
1 - 24	\$1.25	\$4.25	\$5.25
24 - 99	1.20	4.00	5.00
100 and up	1.15	3.75	4.75

WALTER T. KELLEY CO., Clarkson, Ky.

The American Bee Journal

— Hamilton, Illinois

Vol. 98, No. 1 January, 1958

Editor—G. H. Cale

Associate Editors—M. G. Dadant,
Roy A. Grout

Published monthly at Hamilton, Illinois. Entered as second-class matter at the Post Office, Hamilton, Ill. in the United States, Canada and Mexico, \$2.00 a year, two years \$3.50; three years \$5.00. Foreign \$2.50 a year; two years \$4.50;

three years \$6.50. Subscription stopped at expiration date printed on wrapper. Available on microfilm at moderate prices by writing to University Microfilms, Ann Arbor, Michigan.

CONTENTS

The Commercial Beekeeper	8	How To Do It	19
What the Honey Producer Wants When He Busy Queens— John W. Holzberlein, Jr.	8	The Beginner and His Bees — Some of the Things the Beginner Should Know About the Beekeeping Industry—W. W. the Beekeeping Industry— W. W. Clarke, Jr.	20
Using Laughing Gas—John Lis	9	Science and Industry	22
Moving Bees—G. F. Townsend and A. Adie ..	10	The Effect of Penicel, Tetracycline and Ery- thromycin on Adult Bees, Brood Rearing and Honey Production—Joseph O. Mof- fett, William T. Wilson, and Ralph L. Parker	22
Choosing the Breeder Queen— —J. E. Hastings	11	A Tribute to a Friend, Arnold Parker Sturtevant	24
Picture Page	13	Beekeepers Promote Honey and Publicize National Honey Week— S. Joaquin Watkins	25
The Sideline Beekeeper	14	Favorite Recipes	27
Bees Are Adaptable—George S. Graffam ..	14	ABJ Experimental Apiaries—The Control of Bee Disease with Drugs	28
A Plan for Increase—Keith Hudson	15	Meetings	30
Colony Condition Clocks—S. J. Otis	15	Scrambled Persons	33
Minnesota State Fair Champs, Mr. and Mrs. John Larson—Ray P. Speer	16	Crop and Market—M. G. Dadant	38
Problems of a Migratory Beekeeper's Wife —Mrs. J. D. Beals	17		
Equipment Tips—Howard Easling	17		
The Undercurrent	18		



SUE BEE SAYS:

**May
You
Have**

A Happy and Prosperous New Year

One of the most important items is the health of the colonies you will winter over. A small amount of Fumadil B fed this fall will pay big dividends next spring.

We have a large, fresh stock of Fumadil B as well as Terramycin and Sulfathiazole. Check these prices. Your order in the mail today will insure prompt attention.

0.5 gm. Fumadil B.	\$ 2.40
9.5 gm. Fumadil B.	28.50
1 lb. Sulfa Sodium or fine powder	4.50
10 lb. Sulfa Sodium or fine powder	38.25
1 lb. Terramycin T. M. 5	1.25
10 lb. Terramycin T. M. 5.	10.00

SIoux HONEY ASSOCIATION

Sioux City, Iowa

Rogers, Texas - Waycross, Ga. - Tacoma, Wash.
Lima, Ohio - Anaheim, Calif.

Wishing you a

Happy and Prosperous

NEW YEAR

Let us remind you that we stand ready to serve you but you must give us your order as soon as possible for the date you prefer. Orders are now coming in.

We will feed Fumadil B. to control any possible Nosema.

1958 PACKAGE BEE PRICES

	2 lb. w/reg. queen	3 lb. w/reg. queen
1 - 25	\$4.75 each	\$5.75 each
26 - 99	4.50 each	5.50 each
100 up	4.25 each	5.25 each

For Island Hybrid Queens add 30c per package

"THEY PRODUCE"

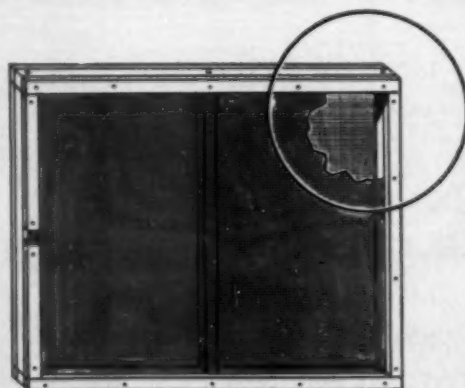
ROSSMAN APIARIES

P. O. Box 133

Moultrie, Ga.

"PACKAGE BEES"

Aeppler Co., C. W.	34, 38	Forehand & Sons, W. J.	7	Sioux Honey Association	4
American Bee Journal	7, back cover	Garon Bee Co.	36	Frank G. Stewart	36
American Rabbit Journal	36	Harper, Carlus T.	35	Stiles, Gene W.	35
Barnes & Son, R. W.	35	Honey Sales Co.	37	Stoller Honey Farms	7
Bee World	7	Hutchison Mfg. Co.	37	Stover Apiaries	6
Bee Industries Asso.	7	Jackson Apiaries	21	Strachan, Don J.	36
Bessonet Bee Co.	29	Jensen's Apiaries	7	Sunkist Bee Co.	7
Blue Bonnet Apiaries	29	Johnson Co., Carl E.	36	Sunrise Apiaries	29
Bordelon, E. J.	37	Kelley Co., Walter T.	3, 5	Taylor Apiaries	36
British Bee Journal	29	Koehnen & Sons, C. F.	37	Taylor, E. R.	35
Brunson, H. C.	21	Leahy Mfg. Co.	21	Taylor, Stewart	35
Burleson & Son, T. W.	29	Little's Apiaries	29	Walker, Eugene	37
Calvert Apiaries	29	Lotz Co., August	21	Weaver Apiaries	36
Canadian Bee Journal	37	Marshfield Mfg. Co.	32	Weaver, Howard	29, 36
Chrysler & Son, W. A.	37	Mitchell's Apiaries	29	Wenner, C. G.	36
Clover Bee Farm	7	Morrison F. E.	36	West, M. C.	29
Cloverline Apiaries	26	Petorama	36	White Pine Bee Farms	7
Cobana Products	36	Plant, W. E.	7	Wicht Apiaries	29
Colley Apiaries	7	Reams, W. D.	29	Wilbanks Apiaries	37
Conneaut Can Co.	29	Rives, J. C.	29	Williams Bros. Mfg. Co.	29
Couch, Louis L.	37	Root Co., A. I.	29, Inside back cover	Wing & Sons, J. E.	29
Cutts & Sons, J. M.	36	Rossman Apiaries	4	Winslett, D. T.	29
Daigrepoint Apiaries	36	M. D. Sawyer	36	Woodman Co., A. G.	3
Dixie Honey Co.	37	Shackelford, John S.	29	York Bee Co.	Inside front cover
Esbe Laboratory Sup.	37				



Kelley's Swarm Control

Our double screen consists of a frame work the size of an excluder, which holds and separates two screens $\frac{3}{4}$ " apart. Its use is to divide the brood nest of a colony that has two hive bodies or more for a brood nest.

Just before swarming time the brood and bees are equalized in each hive body, the screen placed between them with the upper entrance to the rear. The old queen is left below and a new queen introduced above. This amounts to an artificial swarm as the bees are separated but they are together to generate heat which is important in the early spring. This kills the swarming impulse. Supers can be added above or below the screen as needed. At the start of the major honeyflow kill the old queen, remove the screen and you have a powerful colony that will produce a really big crop.

Double screens are ideal for requeening at any season provided you use a double brood nest. You do not kill the old queen until the new queen is firmly established, therefore your colony is never queenless and you have two queens laying for as long as you desire to increase the colony population. If the new queen is not accepted try another queen or reunite the colony simply by removing the screen. This prevents losing a colony in the requeening process and your colony actually grows stronger with two queens laying rather than losing strength in the normal manner when the old queen is killed at the time the new queen is introduced. IF YOU INSURE YOUR HOUSE SURELY YOU WILL WANT THE INSURANCE THESE SCREENS AFFORD YOU IN REQUEENING.

This is a regular catalogue item in our free catalogue, which we will be pleased to mail you.

THE WALTER T. KELLEY CO.,

Clarkson, Kentucky

To You

A Happy and Prosperous

Bee Year

Good bees, good service and good business dealings have always been our policy.

We especially solicit your business if you intend to truck your bees as we are better qualified than most, due to our three branches and large volume, but we still appreciate your business whether it be one package or one thousand.

Orders booked without deposit, payment to be made ten days prior to shipment.

PRICES

Lots of	Queens	2 lb. & Q.	3 lb. & Q.	4 lb. & Q.	5 lb. & Q.
1 - 24	\$1.50	\$4.25	\$5.35	\$6.45	\$7.55
25 - 99	1.40	4.00	5.05	6.10	7.15
100 - 499	1.30	3.75	4.75	5.75	6.75

Tested queens \$2.50 each

The Stover Apiaries

Mayhew, Mississippi

THRIFTY BEES—Combless packages and queens. Three-banded Italians only. Remember — **THRIFTY BEES** are **GUARANTEED TO PLEASE**. write for prices.

W. J. FOREHAND & SONS
Fort Deposit, Ala., Breeders since 1892

BEE WORLD
Including
Apicultural Abstracts

Science is international. So is Bee World, a scientific journal published monthly by the Bee Research Association. Editor Dr. Eva Crane.

Subscription \$6.00 a year, or \$6.50 including membership of the Bee Research Association. Sample copy free.

American Bee Journal
Hamilton, Illinois
Agent for U. S. A. and Canada

ITALIAN BEES & QUEENS
3 lbs. with queen . . . \$4.00
4 lbs. with queen . . . 5.00
Extra queens—\$1.15 Air Mail
Health certificate & live delivery guaranteed

CLOVER BEE FARM
Hessmer, La.

BE OUR AGENT

Since you are a beekeeper you know the beekeepers near you. Why not be an agent for the American Bee Journal? Since it is your favorite magazine, why not do your friends a good turn and, at the same time, help yourself?

Write for particulars.

American Bee Journal
Hamilton, Illinois

Three-banded Italians
Quality and service guaranteed to please.

W. E. PLANT
Rt. No. 2, Hattiesburg, Miss.

FRAMESPACERS

The finest thing ever offered beekeepers.

STOLLER'S

See your dealer or write.

STOLLER HONEY FARMS
Latty, Ohio

HOLLOPETER'S ITALIAN QUEENS
IN SEASON
White Pine Bee Farms, Box 800, Rockton, Pa.

JENSEN'S BETTER BEES and QUEENS FOR 1958

More beekeepers are switching to Dadant "Starline" Queens than any other queen on the market today. So, if you desire to get the utmost pleasure and satisfaction from your bees, be wise, buy "Starlines." Also we have Jensen's World Famous "Magnolia State" Italian Queens. So for your needs in package bees and queens place your order with JENSENS. You get **QUALITY** plus **SERVICE**.

JENSEN'S APIARIES **Macon, Miss.**

PACKAGE BEES — QUEENS

CAUCASIANS for Requeening - rebuilding - increasing.

Best bees obtainable from our 30 years of experience.

You get fast service and a square deal.

QUEENS—\$1.60 each; 2 lb. pkg. with queen—\$4.50. Quantity discounts.

COFFEY APIARIES **WHITSETT, TEXAS**

Telephone 7-2525 through Campbellton

The Bee Industries Association Has Given
Over \$30,000

For Support Of The Beekeeping Industry

During the past seven years the members of the Bee Industries Association have given over \$30,000 to the American Beekeeping Federation, the American Honey Institute, and other worthwhile projects. Included in this total are direct contributions to these two national organizations as well as a percent of their supply sales distributed from a special fund. In addition to the actual monetary donation a great deal of time and effort of the individual members has also been given.

May we suggest that you support through your patronage the following members of the Bee Industries Association who are supporting your industry:

A. I. Root Co. of Texas, San Antonio, Texas
Hubbard Apiaries, Onsted, Michigan
Diamond Match Co., Apiary Dept., Chico, California
Dadant & Sons, Hamilton, Illinois and Branches
Leahy Mfg. Co., Higginsville, Missouri
Superior Honey Co., South Gate, California and Branches
A. I. Root Co. of Iowa, Council Bluffs, Iowa
A. G. Woodman Co., Grand Rapids, Michigan
A. I. Root Co., Medina, Ohio
August Lotz Co., Boyd, Wisconsin
Miller's Honey Co., Colton, California
Marshfield Mfg. Co., Marshfield, Wisconsin

PATRONIZE YOUR B. I. A. MEMBERS

SUNKIST STARLINE QUEENS

We offer you the "Best by Test" Starline Hybrid Queens for 1958. That extra production from these queens is 100% extra profit over the regular stock.

Prices For 1958

1 - 25—\$1.70 25 - 99—\$1.60 100 - up—\$1.50

SUNKIST BEE COMPANY

Convent, La.



The Bessonets (Calvin and Bill) and Eastern Air Lines steward, load package bees on plane for air-age transport.

The Commercial Beekeeper

What The Honey Producer Wants When He Buys Queens

by JOHN W. HOLZBERLEIN, JR.

(Reprinted from April, 1952, page 143)

Beekeepers in the honey-producing states provide a large part of the market for the queens raised by commercial queen breeders. Their cash outlay for queens each year represents quite a sum. This expenditure is in the nature of an investment, an investment on which the purchaser has a right to expect returns. It has been said that the queen is the spark plug of the colony. When one puts new spark plugs into the motor of his car he expects improved performance and better mileage. A new queen should give similar results, she should give the colony a tune-up. This is not always the case, however, and too often the newly purchased queen is not much better than the one she has replaced. Just because a queen is young is no proof that she is always good.

What constitutes this ideal queen, this good investment? Let us list her qualities numerically:

1. It is axiomatic that she be young.
2. She should be of good stock.
3. She must be properly reared—have good size, good egg capacity.
4. She must be healthy, free from Nosema disease.
5. She must be properly mated, fully inseminated.
6. She must be carefully handled.
7. She should arrive on time.

If these seven points are carefully adhered to, and the queen is then satisfactorily handled in the receiving end, she is almost certain to give the desired results. But failure on any one of these points may offset the



others to the extent that the purchaser may lose a great deal more than the initial cost of the queen. Such failure results in the loss of a crop from the colony for which the queen was intended as well as much valuable time. . . . Let us take up these points singly.

1. The queen must be young. It is easy to recognize a young queen laying on a comb of brood, but seeing her after a long trip in a mailing cage is another thing. While I have never known a queen or package man to ship queens from overwintered colonies, yet I have heard the accusation made. I would judge it a poor practice.

Young, yes, but not too young either. She should be laying by all means, and it is preferable if her

brood is far enough advanced so that one can see what the "pattern" is going to be. This may be observed at a glance by an experienced person just before the brood is sealed. If the brood is spotty, the queen is doubtless faulty and will never be able to maintain a top notch colony. We don't want that kind.

2. She should be of good stock. All purchasers of queens do not want the same stock, but a breeder of queens should endeavor to maintain a stock with certain basic characteristics, most of which are conducive to honey production. Maintaining this stock through the selection of breeder queens is one of the queen man's greatest problems. He should not hesitate to expend great effort to establish and then improve and maintain a strain that the purchaser can depend on year after year.

3. The queen breeder's greatest chance to improve his product is probably from the time the young larvae are selected to graft until the cells are put into the mating nuclei. Things he cannot perceive and things he cannot control often take over outside this period, and all that is left for him to do is cull the finished result. But during these 10-11 days conditions are largely under his control and the size of the laying queen is pretty much the result of his skill. Other things being equal, husky queens are always best. Once in a while we see a medium sized queen of outstanding quality, but I'll take the

rugged, agile, young mother that literally wades through the bees like the queen that she is. She is the queen that has the capacity to put out frame after frame of worker eggs, day after day till the season is over. It takes lots of bees to make lots of honey—it takes lots of eggs to make lots of bees. We stand the best chance of getting those eggs from the big queen that was lavishly fed in a big, rugged queen cell that was not "picked too green" or handled too roughly.

4. The queen must be healthy. To be healthy she must come from a nuc that is free from disease, not only the brood diseases but also the adult diseases, principally Nosema disease. During cold, cloudy, backward spring weather, Nosema disease gets so widely spread that nucs, especially small nucs, become badly infected. Even though the queen may not be infected when she is caged, she is almost certain to be when she arrives at the end of a two-to-four day trip caged up with several infected attendants. When Nosema conditions are suspected, attendant bees should be taken from strong colonies with only young bees, whose flying bees have been lost by daily moving, and never from the old, often worn out bees of the nuc itself.

5. The queen must be properly mated. This is a "toughy," but no queen whose mating is questionable should ever be shipped. She will be a total loss. During foul weather queens often fail to mate on time, and as a consequence never properly mate or produce quality brood. Nor does the improperly mated queen last long; her sperm becomes exhausted and she becomes a partial drone layer or is superseded before her time. Too close line breeding may often force queens to mate with drones whose genes are not compatible, resulting in spotty brood. Although the queen may lay a normal amount of eggs their low viability results in too small a number reaching maturity to maintain a strong colony. In order to produce consistently good queens more attention is being paid to the mating factor. It is being recognized that special drone-mother colonies should be maintained in or near mating yards.

6. The queen must be carefully handled. Too often queens are injured when being put into mailing cages or while in transit. Thus weeks of careful work go for naught. Only skilled help should be employed to

cage queens for this is the point where culling should be done. Faulty brood, undersize, dragging legs or crippled wings are all reasons for killing the queen instead of caging her. There is often a rush to get the queens caged, and I suspect that many times the doubtful queens are caged to swell the count or get the order filled. After caging there is still need of careful handling. Queens are surely durable creatures, but they are not indestructible as some seem to believe. They are quickly injured by direct exposure to the rays of the sun and by exposure to temperatures below the clustering point. The necessary act of mailing is in itself no help to getting a queen to her destination in as good shape as she was when she left the nuc.

7. She must be on time. In other words we want service. Timing is as important to the honey producer as the queen breeder. It is the very essence of success. All of us who have had some experience know that bad weather can wreck a schedule. For that reason some allowance for bad weather should be made on both

ends. Our queen installing operations are set up weeks in advance, and to have a shipment of queens a week or ten days late without warning can be disastrous. It often happens, too, that when the queens should have arrived the weather is good, but if they are late they will arrive when it is storming. For that reason it is important that queen breeders do not book too heavy schedules. And when the best laid plans are even then upset as they often are, notify the customer, by wire if necessary, that his shipment is going to be late, and approximately how late. He will appreciate it to the extent that repeat orders will often follow. And then, if in spite of the best you can do, you have sent out some poor queens, make them good. If it is too late to do it in time for the current season make arrangements to send replacement queens to the purchaser when they have their greatest value to him the following season. Honey producers have long memories, but on the whole I believe they try to be fair.

Colorado

Using Laughing Gas

(Ammonium Nitrate)

by JOHN LIS

I wonder how many of us beekeepers could make our work in the bee yard easier by using laughing gas. A teaspoonful of ammonium nitrate added to the fuel in a lighted smoker will lighten such chores as:

Introducing a queen to a queenless colony.

Letting out queen's attendants from the queen cage.

Putting queen's attendants into the queen cage.

Introducing a queen to a laying worker, one of the biggest headaches in the bee yard, and I maintain that using gas is the easiest way of doing it. A puff of this smoke will put any colony to sleep. An extra strong colony will need a little more smoke, but do not overdo.

Best results are obtained towards the evening, when most of the bees are in the hive. After a whiff of this smoke, the gassed bees lie as if dead. They lose their memory and don't know where or who they are. But in 15 minutes they are back at work humming away contentedly as if nothing happened. I also find that in taking down a swarm from a dif-

ficult place, if the bees are given a puff or two of this smoke, they can easily be brushed into a container. It's also a big help when putting up package bees in the spring, eliminating drifting of bees.

I'm sure there are many other ways a beekeeper will find to use laughing gas and have a laughing time of it himself.

Bee Shipping Regulations in Western States and Canada

W. C. Jacobsen, Director of the Department of Agriculture at Sacramento, California, has performed a direct service to the beekeeping public by distributing his A34 mimeograph of "A Summary of Laws Pertaining to the Interstate Movement of Bees and Bee Equipment in Western United States and Canada." The briefed summary gives such regulations for all Western States west of the Missouri River and of the Prairie Provinces in Canada and British Columbia. We need a similar survey for the other states of the union. We assume that copies of the summary may be obtained from the above.

Moving Bees

G. F. Townsend and A. Adie

Department of Apiculture, Ontario Agricultural College

Most persons will find it necessary to move bees at some time. The preparation for such a move will depend upon the distance the bees are to be transported and the type of weather to be encountered on the trip. Bees may be moved either with or without screens.

Short Moves

When bees are moved for short distances they tend to return to their former location. To overcome this tendency colonies to be moved only

*This is a complete reprint of Circular 130, Ontario Agricultural College, by G. F. Townsend and A. Adie.

a few yards should be changed a few feet at a time on successive days. If the bees are to be moved less than 2 miles they should be moved either in the very early spring or very late fall, at a time when little flight is taking place, or moved 5 to 10 miles and about a month later returned to the new permanent location.

For moves of only a few miles the boxes and bottom should be fastened together with staples or lath or bound with steel strapping. The bees should be confined by a tuck-in screen at the entrance. Where the bees can be completely moved and set down in their new location in the evening be-

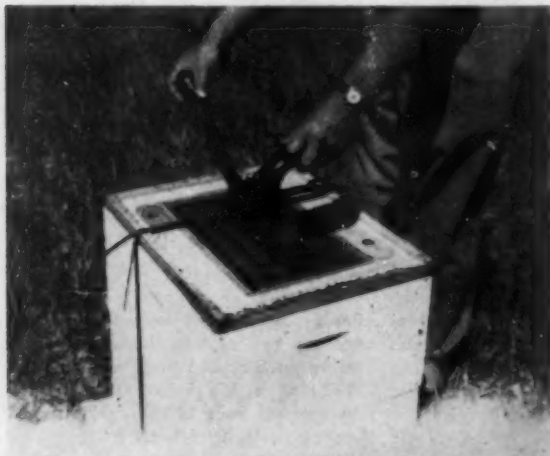
fore dark, the colonies can be moved without any screening at all.

Long Moves

There are two methods by which bees may be moved long distances—either screened or with the entrances open.

Screening—Provision should be made for screening at both the top and bottom of each colony.

The screen at the top should cover the complete colony and allow a clustering space of 2 to 3 inches. Cross supports should be provided to support the cluster above the frames and avoid jarring the cluster from its position. A tuck-in screen should be



Strapping bottoms, hives and top screen together for moving.



Front screens help keep bees comfortable in long moves in hot weather.



Truck covered with lumite; bees not screened.



Charles B. Reed demonstrates hive loader, hand operated from ground.

inserted at the entrance. If the weather is cold the lower entrance may be fastened up tight, using only the upper screen. In hot weather, however, it is necessary to provide both screens.

The bees should be stacked on the truck in such a manner that it will allow sufficient ventilation to all colonies. If non-spaced frames are used the colony entrance should face toward the front of the truck, to avoid swaying of the combs. It is advisable to fasten the three centre frames in place by driving nails through the hand holds at each end of the colony. If the heads are allowed to protrude a little, the nails can readily be withdrawn. The weaker colonies should be placed in the centre of the load and the stronger ones on the outside. If the day is hot, with no showers expected, the floor of the truck should be soaked with water and arrangements made for spraying water on the load periodically during the trip. Very little honey should be left on the colonies

as in case of overheating heavy losses of bees may be encountered. If it is necessary to stop for any reason, the motor of the truck should be left running if possible.

Moving Without Screens: Many beekeepers are making their long distance moves without closing the entrances of the colony. This method is especially good during very hot weather and in areas where it is not necessary to pass through large cities.

Loading should start so that the complete load will be on the truck before dark. A puff of smoke should be given each colony before loading, and several colonies should be left in each section of the yard to catch drifters. These may be placed on the load at the last. It is advisable to keep the truck moving until it reaches its destination. Unloading should be delayed until daybreak.

If the trip lasts more than one day, or if a breakdown is encountered, the truck should be driven or towed before

daybreak to a well isolated spot and the balance of the journey delayed until evening. The bees will fly freely and return to the load in the evening.

STRAPPING COLONIES WITH STEEL BANDS

Steel strapping as illustrated in first picture is the simplest method to fasten colony parts together for moving. Materials required consist of a coil of steel strapping $\frac{3}{8}$ " x .015" and bands to fit. Tools needed are a stretcher and sealer to fit the strapping mentioned.

For short moves one band is required while two bands are recommended for long moves. The same strapping material may be used several times by leaving a loose end about 12" long. Equipment may be purchased through the following firms:-

Canadian Steel Strapping Co. Ltd.,
Toronto, or

Acme Steel Company of Can. Ltd.
Toronto.

CHOOSING THE BREEDER QUEEN

by J. E. HASTINGS

A large percentage of the American and Canadian beekeepers are made up of apiarists operating from twenty-five to possibly three hundred colonies. Many of these have contemplated rearing their own queens for various reasons. They are already wintering their bees or would gladly do so if they could be sure of replacing old or unsatisfactory queens with reasonably uniform stock.

Every year among their colonies one or more outstanding queens appear. How many of us have heard or said at one time or another, "I sure hated to kill that old queen but I just had to replace her. If I could only fill my hives with queens and bees like that I could almost double my yield besides the pleasure of manipulation."

We cannot expect to attain this

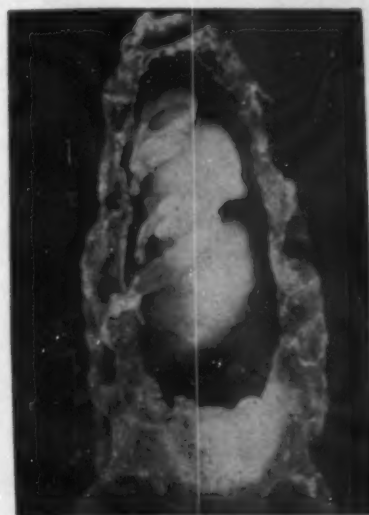
goal in one year or even two but we can go a long ways by rearing our own queens if the proper breeder and rearing methods are chosen.

It is the purpose of the following article to aid the apiarist in choosing his breeder queen.

Regardless of the proposed breeder's record she is useless for such a purpose if she is of mixed breeding. Whatever race of bees we may favor,

RIGHT, well developed queen with plentiful supply of royal jelly.

LEFT, marking queen for identification. Good marking paint is finger nail color.





UPPER LEFT, a normal sized queen with good egg laying capacity.

BOTTOM LEFT, a stubby queen, liable to run-out in a year.

UPPER RIGHT, a rat-tailed queen, too long and slim for full egg production.

must remain quiet during manipulation even to the extent of continuing her egg laying duties while under observation.

Let us now examine the performance record of this queen and her colony.

She should be at least two years old, preferably three and still able to maintain a populous colony. This proves her long livability. Her pattern should be solid with as few vacant cells as possible. She should be able to handle the brood capacity of two standard ten-frame supers. The capings on her worker brood should be flat.

The progeny known as the colony should be gentle, remaining quiet on the frames during manipulation without boiling or bunching. They should use little if any bridge comb nor excessive propolis. The nurse bees should be heavy feeders of brood. This can be readily checked by examining the amount of royal jelly accompanying the larvae of three days and under in age. In previous seasons they should have proved their ability to store large surpluses under normal conditions. Winter hardiness should also be considered. Last but not least, they must prove their tendency to

refrain from swarming even under trying conditions. Many beekeepers use the cells from swarm-bent colonies for requeening. This in my experience is the best method of building up a swarming strain of bees yet devised. In my own breeding program each breeder was originally painted a different color. The queens of each line retain the original color down through the ensuing generations. In this way a fair knowledge of hereditary characteristics (on the mother's side) may be gained. You will find this not only interesting but useful.

The above is a brief outline of the desired qualifications of a breeder queen suitable to the apiarist wishing to improve his stock for production, temperament and slow swarming. Of course the drone is in many respects of equal importance. In my limited experience swarm tendency and temperament is largely transmitted through the drone. Thus by filling as many colonies as possible with stock producing drones of these two tendencies in our mating area we should find improvement in the stock.

I shall attempt in a following article to deal with a system of rearing top quality queens for the apiarist producing moderate numbers.

Birch Hills, Saskatchewan

How about a Card to Wendell Shore?

The many friends of Mr. Wendell Shore, of Superior Honey Company, South Gate, California, will be sorry to learn Mr. Shore suffered a heart attack December 1 while en route to the California State Beekeepers Convention. Mr. Shore has been confined to the Santa Cruz Hospital, Santa Cruz, California, since December 1. However, he is convalescing with excellent results and has been released from the hospital effective December 14. It is anticipated Mr. Shore will return to work during the middle or latter part of January. Anyone desiring to drop Mr. Shore a card may do so — c/o Superior Honey Company, 10920 Garfield Avenue, South Gate, California.

Royal Jelly

Farmers Union of Western Australia, in a recent news bulletin, states that the demand for royal jelly in and around Perth has made for a scarcity and that 5 pounds (\$14.00) an ounce is being paid for it—as quoted in the Australian Beekeeper for March 15.

our breeder queen must have the true color characteristics of her race also her progeny must be uniform in color. Check her drones for color. In my opinion a queen's drones tell as much about her background from the breeding angle as any other factor. They must be as uniform as possible. Unless the queen and her progeny can measure up to the above, discard her. Resulting generations would not likely be of the original high production, desirable temperament, etc. Using hybrid stock for breeding purposes is the specialist's job so leave it to him.

Having satisfied ourselves with our proposed breeder's breeding let us examine the queen for other qualities. She should be large, broad of thorax with a large, well-proportioned abdomen for heavy egg production. She



What Can the Chief Do?

Bernhard Boer, Henderson, Neb., sent this picture of Police Chief, Wm. Wolfe confronting unusual parking violators. How can he give a ticket to a bunch of bees? (Photo by C. E. Bradwell.)



Mary Alice Hamilton, Tenn. Honey Queen

Miss Mary Alice Hamilton was chosen as Tennessee Honey Queen at the annual meeting of the Tennessee Beekeepers' Association, Inc. Miss Hamilton is a grand-daughter of a beekeeper of many years experience, Mr. R. W. Condra of Martin, Tennessee, and who is also a member of the state organization. Miss Hamilton lives in Clarksville, Tennessee, and is a member of the Montgomery County Beekeepers' Association. She is a student at Austin Peay College. In the picture with Queen Alice is Tennessee's Apiculturist, Leslie H. Little.



National Orange Show Prize

Mona Schafer, Home Economist, Manager of the California Honey Advisory Board, secured this picture of Honey Glazed Cake, a prize winner at the National Orange Show, recipe by Mrs. Hazelle Sabtella. Judges are all Home Economists. (Mrs. Schafer second from left.) This show conducts the world's largest baking contest. We will have the recipe in our new Recipe page later.



Luscious and Oh How Good!

Can you say that for your glass packed comb honey? Too many bulk packs only have one "floating" cake of comb honey, maybe cut short and clearly cull. Perhaps it does help sell a lot of liquid honey but most folks go best for a good, full pack like this.



Two countries here - Australia and the United States. So bee men love honey. The left man is Dr. G. H. Cole, Jr.; the other two, in front, Alf Eastley and Murray Charlton of Australia who also like honey.

The Sideline Beekeeper

BEES ARE ADAPTABLE

by GEORGE S. GRAFFAM

From the March, 1955, ABJ, page 97, I quote the following, written by Dr. V. G. Milum: "Errors creep into written reports as printed in books and journals which, even though later corrected, may not become known because of language difficulties or unavailability of the literature. Thus future writers may continue to repeat the errors for decades or even centuries."

I can endorse this statement because I find so much taught about bees today that is only partially true or even perhaps wholly false. The student when preparing a factual article is taught to quote his authorities even if the footnotes required take a large portion of the page. Sixty years of observation of bee life convinces me that many an error today has come to be accepted as actual fact.

Almost any book on bees points to a division of labor, usually according to age. There are nurse bees; there are guards; there are builders, and so on until all are classified. But when I use my hive tool to scrape burr comb from the topbars of the frames, every bee in reach begins to suck up the spilled honey. If I withdraw a comb from the hive and purposely damage the sealed over portion near the top corners I again find that all the bees present are anxious at once to clean up the dripping honey and start restoring the damage done to the comb.

I drop a string-like scraping of soft bee glue onto the face of the bee covered comb. All the bees pick and pull at it and carry bits to the wooden frames and stick them down. Then return for more. Soon it is all disposed of but not by any particular class of bees.

A stream of thinned honey poured over a bee covered comb is quickly cleaned up with the cooperation of all the bees present. Chaff or litter spilled over the frame tops when handling packing is not removed by special trash collectors but by the concerted efforts of all the bees present.

We are told that only bees of a certain age and experience are field workers. On this warm and sunny September day it seems as if flight had suddenly doubled. Young bees and ragged oldsters are tumbling in and out side by side. Some influence of the declining sun seems to make them aware that the season draws to an end and, like a big family, they all hurry to the harvest.

The most ragged and shiny have tremendous loads of pollen and as they come into the glass hive I have been watching they pay attention to no others but kick the pollen off their legs into the first cell they find with room to contain it and hurry off for more.

And so it is with those carrying nectar. They look for no house bees but quickly disgorge into the first

cell they find with room and race to the entrance for another trip. They even paint the drops onto the top sides of cells containing eggs or larvae. In a bit of comb built next to the glass as a brace I can see the extended tongue paint the thin nectar into an upside down cell where capillary attraction holds it in place. In the evening these same field bees will be moving these drops in the brood cells to more proper storage unless some others have already done so.

I often release a valuable queen by releasing her at once on a comb of emerging brood from which all bees have been brushed. I also try to have some very young brood somewhere in the comb. I find this brood is cared for, but if authorities are right, the newly emerged bees are not capable of feeding larvae in the first few hours of their lives. Also these little colonies, with only newly emerged workers, are bringing in honey and pollen by the third or fourth day.

So I believe there is a reason for the large brain capacity of the honey bee. I believe that, more than any other insect and even more than some other animals, they have an awareness of colony needs and a wonderful adaptability in their application of their labor to those needs.

Today's scientific investigators are trained in laboratory methods. By controlled experiments they find and give us wonderful new knowledge. But before all their findings are accepted it is well that we can evaluate them in the light of long and careful observation.

Natural conditions are not controlled like the background provided by our experiments. One spring is warm and bright; another cold and wet. Some honeyflows come like a freshet; others drift scantily

through the days in adverse seasons. Some winters come early, set down hard and stay late; others are open. So let's thank God for our adaptable helpers, the ever-watchful honey bees. Maine

A Plan For Increase

by KEITH HUDSON

There is perhaps nothing new or unusual about a plan I have used for increase. Seemingly the ingenuity of the modern beekeeper has thoroughly tested every way to produce a divide that will develop into a strong colony capable of securing a surplus. Many circumstances also govern any plan one uses to suit his particular needs.

In April 1956, ten queens were purchased and established in single story, ten-frames hives. For each, two combs of brood with bees from strong colonies which had been fed heavily and had young queens were taken to introduce the new queens.

In early May, after the queens were established and laying, five double colonies, with queens which needed to be replaced, were used to provide the second story for those ten queens

which had been established in the single hives. The five old queens were found and disposed of and one unit was set above newspaper over each of the ten new queens.

As an experiment, to test this plan, a two-story colony of comparable strength was divided and each division given a new queen on separate stands and later given a second body for room. They did not produce the surplus that the ten new queens did.

Perhaps many others have used this plan and its objections may outnumber its merits. However in this case it was very successful. Five old colonies contributed to and made up ten two-story units that produced a crop at the expense of ten queens and five extra bottoms and lids.

Fairbury, Nebraska

row indicates the day of the month by pointing to the outside numbers. The clock dial and the outside tacks are of aluminum; the center screw and washers of brass and the hands are enameled steel so as to assure long life in outside weather.

Following is a code for the clock letters that I have found useful in queen-rearing work here in Wisconsin:

- A—Empty, no frames.
- B—Three frames, no bees.
- C—Old laying queen present.
- D—Laying worker or drone layer present.
- E—Stocked with bees, no queen.
- F—Needs bees, no queen noted.
- G—Ripe queen cell introduced.
- H—Virgin queen introduced.
- I—Virgin queen noted.
- J—Virgin queen noted, needs feed.
- K—Laying queen noted.
- L—Laying queen noted, needs feed.
- M—Laying queen removed.
- N—Laying queen present, crowded conditions.
- O—Ripe swarm cell noted.
- P—Danger for wax moth.

Additional codes can be used by placing the shorter arrow between the letters so as to give indications AB, BC, CD, etc. If the clock is to be used on a multiple-bodied research or production hive, it can be tacked at one end of a piece of ordinary 1" x 6" lumber approximately 18" long and placed on top of the outer cover. If a cover weight is used, it can be set on top of the board near its center.

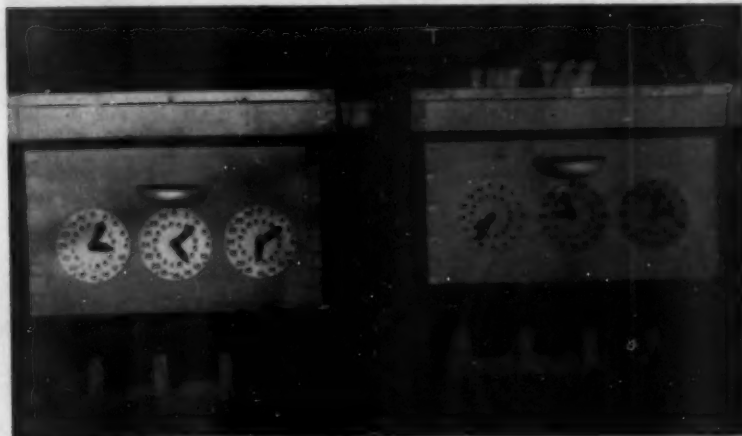
Madison, Wis.

Colony Condition Clocks

by S. J. OTIS

The picture shows two hive bodies that have each been divided into three longitudinal queen-mating nuc compartments. The clocks shown are "Colony Condition Clocks" and are fastened to the back of the hive body. Each clock is associated with the nuc compartment in front of it.

The Colony Condition Clock (CC Clock) is used on queen-mating nuc boxes and on hives where it is helpful to know the condition of the colony at the time of last inspection. The shorter arrow (green) indicates the condition by pointing to a particular code letter. The longer (red) ar-



Drive Carefully - The Life You Save May Be Your Own

Sort of a commonplace slogan but it is a good one and is the keynote of the new special report from the Department of Public Safety for Illinois. Often fatal accidents are due to poor visibility, bad road surface, night driving, speed. Beginning in December, usually the high point for traffic accidents, particular attention should be paid to driving safety. Over 2000 killed a year in Illinois and over 85,000 injured is a real cause for alarm. No matter what state you live in you have a similar problem. Co-operate with your safety council, with your state laws, with your own good sense.

Minnesota State Fair Champs

MR. AND MRS. JOHN A. LARSON

by RAY P. SPEER



Pancakes doused in honey. Their honey prizes are in the framed collection won at the Minnesota State Fair.

When John A. Larson decided to quit the painting and decorating business and switch to beekeeping, his friends nodded knowingly.

John, they agreed, had bees in his bonnet.

But John went ahead with the deal. That was 22 years ago. Any suspicion that he might have been stung has long since disappeared.

Larson has become so proficient in the ancient art of honey production that he now is one of Minnesota's top men in the field.

At the 1957 Minnesota State Fair, he won four blue ribbons for fancy section white honey, honey gift package, Hoffman or other deep extracting frame, and exhibit of Italians, queen and bees.

Larson first got started thinking about bees when he was given a hive of bees in part payment of a debt. One hive led to another and before he knew it, he had sold his home at 204 S. Cedar Lake Road in Minneapolis and bought 17½ acres near Taylors Falls, Minn.

Any regrets? None.

"I often laugh at the 'risk' my neighbors and friends thought I was taking when I sold my home and cast my lot with bees and chickens," he recalls with a smile.



John Larson busy extracting his crop. Pictures from Minnesota State Fair publicity.



"How about that, Mother!" Larson exclaims proudly to his wife.

"I got on fine, though, and I've enjoyed the past 20 years more than all the nearly 50 preceding them."

It took Larson until 1951 to get up enough courage to show his honey at the Minnesota State Fair. He won a fourth prize that year, and two thirds and a fourth in 1952.

At the 1953 fair, however, he won so many prizes that he was one of five exhibitors awarded prorated sweepstakes honors. The next year he paced the field by winning the top award on his displays of honey, beeswax and bees. He took top sweep-

stakes honors again in 1955 and 1956.

All the honey produced in the Larson apiary is sold through some 70 stores in Minnesota and Wisconsin, and at Honey House, his remodeled barn.

His wife helps. She, too, is a veteran Minnesota State Fair competitor of note in honey products. At the 1956 state fair, she won first prize on mint and currant jelly and ice box cookies, in which honey was used as a sugar substitute. Press of work at home did not permit her to show honey products at the 1957 state fair.

Problems of A Migratory Beekeeper's Wife

by MRS. J. D. BEALS

First I will say that a migratory beekeeper's wife must have good mental and physical health, she must have the ability to do the best she can with what she has and get a bang out of it.

One must be satisfied to live in rented houses and apartments in any part of the country, especially the first few years of married life.

I always made it a point to be happy and satisfied and have peace of mind wherever I hung my hat.

I found it necessary to make new acquaintances semi-annually, and that means one has to get along with people whether it be in families, at school, on the job, at play or in a community.

Schooling poses a large problem if there are children in the family. Some migratory beekeepers have their children attend school in the two states and the pupils do well. Other families find it necessary to buy a home and live nine months in one location. This is especially true if a family has anti-social children.

We are told it is well for husband and wife to have a vacation from each other; and a beekeeper's wife living in one section all school term finds herself in that category during May and September and possibly most of October.

Do our problems get us down? I say NO.

On the trip from the starting point to destination, one needs the patience of Job, as the trip usually lasts three to four days. A little switch at fath-

er's feet is a forewarning of more severe discipline. A good plan is for mother to have many games ready; for instance, finding the alphabet from A through Z on sign boards; counting cattle, counting any four legged animals and many more games.

Living from a suitcase surely is a problem, but thoughtful and careful packing overcomes this.

The quantity of children is a problem to be sure, but why not take the attitude—"The more the Merrier, or "Cheaper by the Dozen."

We should take advantage of the Church and Sunday School as well as day school which supports and supplements our homes.

Let's stop worrying or being over-anxious all the time. Most of the things we worry about never happen. Possibly the answer to all our problems would be to eat royal jelly and honey.

EQUIPMENT TIPS

by HOWARD EASLING

I use two ten comb brood chambers the year round. All bodies have a hole bored in one end. This hole is one inch in diameter and the center of the hole is seven-eighths inches below the handhold. This size seems to be about right and corks may be obtained to fit when it is desirable to close the hole.

In boring the hole I tilt the auger toward the hive bottom so any rain

striking the hole or hive front will not run into the hive. Also while boring the hole it is well to have a piece of wood pressed firmly against the inside of the area being bored or the auger on breaking through will often splinter the inside surface of the hive end.

At first, in using these holes for winter entrances, I was troubled by the thought of mice entering but that problem can be solved this way:

From aluminum wire diameter .106", cut pieces about five inches long. Then obtain a short piece of rod, a fourth inch in diameter (a bolt will do). Place the rod cross-wise in the center of the wire lengths, one at a time, and bring the ends together until the wire is shaped like a hairpin. A little shaping with pliers at the bend may be necessary.

Now take a piece of the shaped wire and place across the bored hole on the inside of the hive end. Nail in place with three small staples. If you have used care the hole is now divided by the wire into three sections of about equal width. A little bending of the wire may be necessary to equalize the spaces. This should end mouse worries.

Corning, New York

Granny's Recipes

Tuttle Publishing Company of Rutland, Vermont has just issued a 68 page book of honey recipes and remedies as compiled by Dr. Alice Cooke Brown, Dean of Women at Hillyer College in Hartford, Conn. The title of the book is "Granny's Honey and Beeswax Prescriptions," and is a compilation of remedies, recipes and recommendations from "old time" sources, one of which we might mention as the work of James Thacher (1813). Ointments, salves, cough balm, and many old home remedies are included as well as recipes for candies, cookies etc. If we depended as much on honey and beeswax as did our forebears; if honey were as universally used now as then, there would be no problem of disposing of the crop at figures at least the equal of those in European countries. The book is a fine library item as well as for general use.

In paper covers it is priced at \$1.50 and may be obtained from Dr. Brown as above. We have stocked these books at Hamilton also for the convenience of our subscribers.

THE UNDERCURRENT

Now the reader may speak his mind about some underlying problems in this industry. If possible "Undercurrent" will be a feature of each issue of the Journal in 1958. A subject for consideration will be given in the month before (as in this issue) in perhaps the form of a question. If you are interested answer it the best you can. But there are limitations. Lengthy material cannot be used for the very obvious reason that one page does not allow enough room. Your contribution to "Undercurrent"

should be very short; like a telegram; or words a postcard will carry. If length of material is adhered to, a lot of replies will go in a page like this. Also, to be considered for the "Undercurrent" discussion, get your reply here, American Bee Journal, Hamilton, Illinois, Undercurrent, on or before the 15th of the month before publication. For instance, on or before the 15th of January for the February issue. After that may be too late.

The Undercurrent question for February is this:

How Shall We Build For A Brighter Future?

No suggestions are offered. Do your own thinking. Also when you answer, if you wish, suggest a question for consideration. We may not use it but we will at least answer you. Do some deep undercurrent thinking and make your question something

that is vital to the entire industry; not just to you. Maybe some of this will expand into longer discussion on some other page. It's up to you now. Good going. Printed contributions will be credited to subscription at the rate of one month per inch.

The 1958 Journal

With this issue for January some considerable change is apparent which will make the 1958 Journal different from 1957. These changes have been considered by all our staff and approved, with the hope that the journal will be more exciting and interesting to readers than before. At the outset, attention is called to the new form from the point of view of modern journalism. Long articles become more and more difficult to use in most departments. It takes just so much money to develop, print, assemble, illustrate and mail the Journal; to pay the fare, income must be received from subscriptions and from advertisers. The two must at least balance. So the addition of reading pages must be determined by the support we get; not by the fact that we have contributions we can use only if we add more pages. So please keep your contributions as short as possible; or allow us to use manuscript in installments; or allow us to shorten at our own discretion. Now, we welcome contributions to all departments so don't let these remarks scare you. Let's help make 1958 a vastly improved reading year.

About this issue again. Don't you think our Contest Editor is a nice looking lady? She has two contests now—the Cover Contest and her Scrambled Persons. We are happy to have Bill Clarke, Jr., for "Beginners" again. Don't know just how it will be handled. He is now deep in study, so in this issue we pinch-hit for him. The smaller department pictures each release about two thirds of a page that used to be lost to the department. The reproduction of a back article was suggested by Earl Robinson (see his "Plan of Work for Intensive Beekeeping" in December). He says some of the best material has appeared in back issues. And that picture page, let's hope it can be used often as we have a frightful accumulation of pictures from readers. "How-to-do its" have been asked for by readers frequently. Recipes, questions, and "All Around the Bee Yard" will be alternated. (Gee, if we only did have more pages.) How do you like "American Bee Journal Experimental Apiaries"? Starts answering some of your requests—what do we do and how do we do it. So now, what do you think about your improved Journal?



How To Do It

Well, you asked for it, so here it is, an old feature brought back to life by popular demand. Every item on this present page came from the days in back issues when "How-to-Do-It" were frequently used. See what you can do with similar contributions. Address "How-to-Do-It," American Bee Journal, Hamilton, Illinois. The item we think to be the best will be used first, with a picture if you wish, and the winner's subscription will be extended three years. For the three runners-up, each a full year. Balance — well, we'll see.

Burr Comb Pail

While going through a yard getting ready to remove supers, I learned the advantage of a covered pail into which I could scrape burr combs. Often considerable honey is built between supers and if left to drip or leak can start a robbing festival. The type of covered pail used in the kitchen with hinged lid and a foot pedal to lift the cover will soon pay for itself in the bee yard, and can be set on the truck and emptied upon return to the honey house.

Next time I buy one, I'll keep the new one wrapped until it gets to the yard, and avoid having it swapped for the one in the kitchen!

M. M. Moore,
Iowa

Getting Rid of Ants

Here is a remedy for ants which like to build on top of the inner cover. In our apiary this is a very common thing and when we open the hive and notice a swarm of ants on the cover we sprinkle a little Old Dutch Cleanser powder on the ants and eggs and replace the outer cover. When we return the next day or later the trouble is over. We also place a little powder around the base of the hive as an extra measure of protection. We have used this method for three years and it seems to solve the problem.

Henry E. Puchta,
Missouri

Take Care of Those Cans

When packing honey in tin pails or 60-pound cans one often finds some of these tin containers which have small rust spots upon them. Give these spots a good rubbing with steel wool, fine grade, and these spots disappear. Finger marks, small spots of wax, propolis, etc. may be quickly cleaned off by using steel wool. Wash off the can with clear gasoline, place the honey label in place with glue, and then wipe tin can with a rag moistened with kerosene. This prevents the tin from any further rusting and cans may be stored until needed for sale.

After 60-pound cans have been emptied, washed out with hot water and rinsed several times to remove every trace of honey, one can insert a 10-watt light bulb in the can and in a short time the can will be perfectly dry. When dry, the caps should be screwed on so no dust or other foreign matter can enter. Clean up with steel wool and give a light coat of kerosene to prevent rust.

E. F. Bea,
Minnesota

Propolis and Wax for Smoker Fuel

A fuel that produces a good cool smoke and does not irritate the bees may be made during the winter months from propolis and wax which has been scraped from frames. Spread these scrapings on an unraveled gunny sack and roll it up. Cut the roll into sections to fit the smoker and tie each section.

Tho's. Johnstone,
Vancouver, B.C.

Temporary Smoke Room On Truck

Our Wisconsin and Hamilton Apiary Manager, Elva Kirlin, proves that necessity is the mother of invention. It was one of those days during crop removal when bees seemed to be most interested in robbing. Kirlin threw the heavy load tarpaulin over the truck, covering the load completely and a dose of repellent was sprayed over the outside of the tarp. Then a temporary "back door"

was made and a couple of lighted bee smokers placed in the "door." Loading was unhampered and there was soon very little robbing.

To Keep Smoker Lit

Many find it hard to keep the smoker lit all the time they are using it. Take discarded rags and pour borax water over them. Dissolve a small cup of the borax in warm water to make the liquid. Thoroughly wet the cloth and then hang up to dry. Do not hang in damp and windy place as that dissipates the borax. After the cloths dry, tear off any size piece you wish, put in smoker and light. After a minute it cannot be put out. I use it with great success.

C. A. Brown,
Ohio

A Simple Top Insulator

When closing up hives for winter, I wrap the excluders in several thicknesses of newspaper and place them over the inner covers of the hives. This stores them safely and puts an air-space insulator under the cover of the hive.

Henry Fricke,
New York

Using Natural Cell Cups

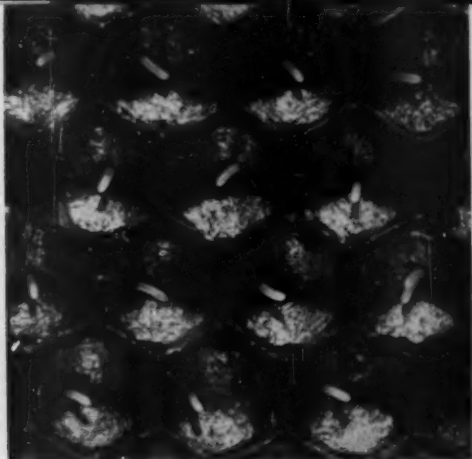
If you wish to make some grafts for new queens, you will find the cell cups started here and there on the combs by the bees highly acceptable to the bees. These cups may be cut off and stuck on the cell bar. By priming them with a little royal jelly from a started queen cell you will get better acceptance.

W. P. Kinard,
Mississippi

How to Clean Queen Excluders

I clean queen excluders of wax and propolis by using a wire brush such as painters use to remove old paint from buildings. I find this works better than using heat as there is no danger of damage to the excluders and the wire brush does a quick and effective job.

Frank L. Wheeler,
New York



Eggs in the cells; some reclining (ready to hatch); some straight up (just laid). In cell bottoms larval food (royal jelly for first three days).

The Beginner and His Bees

by W. W. Clarke, Jr.

Some of The Things the Beginner Should Know About the Beekeeping Industry

Honeybees are found in every state in the United States and it is estimated there are about six hundred thousand people who keep bees, from those with one colony to those with several thousand. Honeybees are kept both as a vocation and an avocation, some depending on their bees for all or a part of their living, while others keep bees merely for the pleasure they get from working with them or for the services the bees render in pollination.

If we define the commercial beekeeper as one who depends seriously on a financial return from his bees for a part or the whole of his income, we include a large majority of beekeepers. If, however, we define the commercial beekeeper as one who depends on beekeeping as a source of the greater part of his income, it is likely that not more than 20 per cent of the estimated six hundred thousand beekeepers in the United States would fit the definition, since the average beekeeper probably has about ten colonies.

The extent of beekeeping is influenced considerably by the soils and climatic factors which affect the amount and kind of floral sources that furnish nectar and pollen. These sources also influence the number of colonies which may be kept in one place and the beekeeping practices used.

The type of agriculture which prevails also has its part in shaping the kind and extent of beekeeping. Since the beekeeper does not have complete control over these factors, success is a measure of his skill and ingenuity in managing the bees to take full advantage of whatever may be his situation.

According to the United States Department of Agriculture, Bureau

of Agricultural Economics, there were 5,219,000 colonies of bees in 1944, with a production of 188,969,000 pounds of honey and 3,921,000 pounds of beeswax. At the price levels which then prevailed, the honey crop amounted to \$22,676,280 and the beeswax crop to \$1,627,215. The beekeeper, however, is not the one who enjoys the greatest value from honeybees. The service the bees render agriculture in the cross pollination of fruits, vegetables, legumes, and other seed crops is worth many times the return which the beekeeper receives. Beekeeping is, therefore, not just a branch of agriculture; it is often the very basis of it.

Types of Honey Production

There are three types of honey production: extracted honey, comb honey, and bulk comb honey. Most bees are used in the production of extracted honey. Extracted honey is easier and more economical to secure and, considering the country as a whole, extracted or liquid honey finds a more ready market. Some beekeepers prefer to produce comb honey while others are so situated that bulk comb honey is best suited to their local markets. It is probable, however, that not more than 20 per cent of our honey production is in the form of comb honey or bulk comb honey.

Specialized Efforts

The rearing of queen bees for sale is an industry in itself. Queen bees are raised in most of the states, but queen rearing is more important in the South and in California where the season is long and nectar is available early in the year. Closely connected with queen rearing is the business of producing package bees for sale, a business also located principally in the South where colonies

of bees may be built to strength early.

Supplying bees for pollination is another specialized effort. Bees for this purpose usually are moved to the orchard, greenhouse, or farm where cross-pollination is required, and removed when their services are no longer needed. In most cases this specialization is undertaken in addition to the practice of honey production. The beekeeper usually is paid for this pollination service.

Beekeeping Regions

It is extremely difficult to designate definite regions or boundaries in relation to flora and beekeeping practice. Voorhies, Todd, and Galbraith¹ divided the United States into eight regions to discuss the geographic distribution of beekeeping: the white clover belt, the southern region, the Plains area, California, Texas, the Pacific Northwest, and Arizona. Phillips² divided the country into five regions: the white clover region of the Northeast, the south-

¹Voorhies, Edwin C., Todd, Frank E., and Galbraith, J. K. Economic aspects of the beekeeping industry. *Calif. Agr. Exp. Sta. Bul. 555*. 1933.

²Phillips, E. F. *Beekeeping*. Revised ed. New York, N. Y. The Macmillan Co. p. 221. 1928.

eastern regions west to Texas, the alfalfa area of the West, the sage area of southern California, and the semi-arid region of Texas and adjoining states.

(Continued in February number)

If you have even the simplest questions, often natural with Beginners, send them in for answer. If enough questions are received, Bill will try to make them the basis for his page as often as possible. We don't want to rehash what was printed here last year. Some new approach is much more desirable. So send in your questions or suggest the kind of information you want to have covered in this department.

THREE BANDED ITALIAN PACKAGE BEES AND QUEENS

Shipped anywhere in United States and Canada

1958 PRICES — FOB Hampton, South Carolina

	Queens (each)	2 lb. & Queen	3 lb. & Queen	4 lb. & Queen	5 lb. & Queen
1-24 Packages	\$1.40	\$4.25	\$5.25	\$6.25	\$7.25
25-99 Packages	1.30	4.00	5.00	6.00	7.00
100 up Packages	1.20	3.75	4.75	5.75	6.75

(For Queenless Package deduct Price of Queen)

Queens clipped and painted if desired
Health Certificate with each shipment.

Guaranteed safe arrival.

Shipper rated in Dun & Bradstreet

TERMS: One third with order, balance 15 days before shipment.

H. C. BRUNSON

P. O. Box 188

HAMPTON, S. C.

Phones 2151 — 5303

HOLIDAY GREETINGS

TO ALL

and

Sincere Appreciation
For Your Patronage

from

AUGUST LOTZ COMPANY

Manufacturers & Jobbers
Bee Supplies

BOYD, WISCONSIN

"Thank You"

is the most sincere expression we know
of to convey our appreciation for your
friendliness and patronage this past
year.

May we extend to you our cordial
greetings and good wishes for happi-
ness and prosperity in the New Year.

Leahy Manufacturing Co.

Dept. AB

Higginsville, Mo.

Three Band and Pure Italian Hybrid Package Bees and Queens



We Ship Pure Worker Bees By Mail, Express
or Truck — With Queens Introduced or Not
Whichever You Like.

We Guarantee Live Arrival

1958 Prices

Each with a young Laying Queen

Lots of	2 lbs.	3 lbs.	4 lbs.	5 lbs.
1 to 11 Each	\$4.25	\$5.35	\$6.45	\$7.55
12 to 20 Each	4.05	5.10	6.15	7.20
30 or More Each	3.85	4.85	5.85	6.80

Tested Queens—\$2.00

JACKSON APIARIES

P. O. Box 58

FUNSTON, GA.

The Effect of

PENICEL, TETRACYCLINE and ERYTHROMYCIN

on Adult Bees, Brood-Rearing, and Honey Production*

by JOSEPH O. MOFFETT¹, WILLIAM T. WILSON², and RALPH L. PARKER³

A field study was conducted in 1957 to determine the effect of three materials on brood rearing and honey production of nuclei. Penicel was included in these tests because previous work had indicated it may increase honey production; Tetracycline had cured American foulbrood faster than either sulfathiazole or TM-10 (a terramycin-containing compound) and was included to determine its effect on healthy bees; Erythromycin had given good control of European foulbrood in previous years. Gallimycin was the source of erythromycin in these 1957 studies.

The nuclei. The nuclei for these studies were bought from G. C. Walker, Jr. of Pharr, Texas. More than 100 nuclei were transplanted from Pharr to Fort Collins by truck. Each nuclei consisted of a mated queen, two frames of brood, a frame of honey, and adhering bees. The bees arrived in Fort Collins on April 22.

Forty of the nuclei were established in each of two different apiary sites. The remaining nuclei were placed in a different apiary, and the queens from these surplus nuclei were used to requeen the experimental nuclei whenever the latter became queenless.

*The data in this paper is from part of the research to be presented by the senior author in partial fulfillment of the requirements of the Ph. D. in Entomology at Kansas State College, Manhattan, Kansas.

1. Assistant Professor, Colorado State University.

2. Former Graduate Assistant, Colorado State University.

3. Professor, Kansas State College.

The Smith orchard apiary had access to dandelions and cherry trees for spring build-up. Its source of surplus honey was mainly yellow sweet clover and alfalfa. This apiary site proved much better than the Horticultural Farm apiary site, averaging 52 pounds of surplus honey, compared to only a 28 pound average at the Horticultural Farm.

There were few plants for the bees to build up on at the Horticultural Farm. A few dandelions provided some spring flow. The surplus honey was mainly from alfalfa. Both apiaries suffered greatly from cold, damp weather which lasted until mid-June. These bees were fed sugar sirup on June 17th, and some colonies in both apiaries had been damaged by being short of stores. (I had never fed bees near Fort Collins

after the first week of May in previous years.) The colony average for most apiaries containing overwintered colonies in the Fort Collins area was from 20 to 60 pounds, depending upon the apiary site.

Treatments. Before the treatments were started, each nucleus was examined to make sure it was queen-right. If any queen was not doing well or was lost, a laying queen was supplied from the extra nuclei not involved in the experiment. Six treatments were applied at weekly intervals starting on May 1 and ending on June 5.

A total of 20 nuclei received each of the different treatments, with 10 colonies in each apiary given one treatment. Ten colonies in each apiary were left untreated.

Fifteen grams of penicel were given to each nucleus each week. Four and three-tenths grams of gallimycin were added to 25.7 grams of powdered sugar to make the weekly dosage given each nucleus in the erythromycin tests. Gallimycin contains 21.1 grams of erythromycin activity. In the tetracycline study, 3.6 grams of tetracycline-vet (a preparation containing 25 grams of active tetracycline per pound), was added to



Photograph 1. The materials were shaken into an empty frame and placed next to the brood nest. In strong colonies this empty frame could be placed in the middle of the brood nest. The bees removed the gallimycin and tetracycline from the empty combs readily, but left some of the penicel.



Photograph 2. Adult bees were placed in queen cages, and then fed varying concentrations of erythromycin lactobionate and gallimycin. The day each bee died was recorded and the average length of life of the bees in each cage was calculated.

26.4 grams of powdered sugar to make a weekly treatment for each nucleus. The penicel and gallimycin were supplied by Abbott Laboratories. Charles Pfizer & Co., Inc. supplied the tetracycline.

The materials were placed in empty combs just outside the brood nest. The bees removed the gallimycin and tetracycline readily; they left part of the penicel in the cells, even building brood around small patches of penicel in some cases and leaving the cells containing the penicel alone. A level teaspoon of tetracycline weighs about 3.4 grams, while a level teaspoon of gallimycin weighs about 4.6 grams.

Results. The 10 nuclei treated with gallimycin averaged 22% more brood than the untreated nuclei in Smith's orchard, and 43% more brood in the second apiary (Table 1). The penicel-treated nuclei averaged 23% more brood in one yard and only 4% more brood in the second apiary than the check colonies. The nuclei receiving tetracycline had 20% more brood in the Smith's orchard apiary, and 11% less brood in the second apiary. No reason for the difference in the effect of tetracycline between these two apiaries was found. The first apiary had favorable conditions for spring build-up, while the second did not.

The nuclei receiving gallimycin averaged 32 pounds more surplus honey in one apiary, and 26 pounds more surplus honey in the second apiary (Table 1). The penicel-treated nuclei averaged 26 pounds more surplus in one apiary and six pounds more surplus in the second apiary. The nuclei given tetracycline averaged 40 pounds more honey in Smith's orchard apiary, and three pounds less honey in the Horticultural Farm apiary.

Tetracycline and gallimycin prevented EFB. Seven of the 20 untreated nuclei broke down with European foulbrood during the treatment period, as did six of the 20 penicel-treated nuclei. None of the 40 colonies receiving either tetracycline or gallimycin showed European foulbrood. The 13 nuclei that contacted European foulbrood were treated with tetracycline. Twelve of these colonies cleaned up completely within either one or two weeks, but the other colony died. Since these colonies were examined weekly during the spring, the disease was in the early stages when treated.

When these diseased colonies were eliminated from the figures for brood rearing and honey production, there

was a slight increase in the figures for untreated colonies.

Other studies on these materials. In previous years we have conducted other studies on these materials. A short summary of these studies follows.

Penicel. This material failed to control or prevent European foulbrood in 1955 studies, and it also failed to control American foulbrood. Ten colonies treated three times at weekly intervals during June, 1955 yielded an average of 138.8 pounds of surplus honey compared to an average of 117.4 pounds for 10 similar untreated colonies.

Erythromycin. This material has given good control of European foulbrood in 1954, 1955, and 1956. The gallimycin form of this compound was used in 1956. It has not proved effective against American foulbrood.

In disease experiments conducted by Wilson in 1956, colonies receiving the highest dosage of gallimycin (15 grams per treatment) showed the greatest increase in strength. Colonies receiving the two smaller dosages (11.5 and 4.5 grams) controlled European foulbrood equally as well as the higher dose.

Tests were conducted to determine the effect of various dosages of gallimycin and erythromycin lactobionate on the longevity of caged adult bees.

These materials were fed to the caged bees until all the bees in a cage were dead. Ten cages of bees were fed each concentration of the different materials.

Moderate concentrations of the two erythromycin-containing compounds did not adversely affect the length of life of the caged bees (Table 2). Two concentrations of gallimycin (10 and 100 p.p.m.) may actually have been beneficial, since the bees in the cages receiving these dosages lived longer than the bees in the ten check cages. Very large dosages of both materials reduced the length of life of the bees severely.

Tetracycline. This material has given very good results against American foulbrood in 1956 and 1957. An experimental apiary containing American foulbrood diseased colonies was established in 1956. This apiary was divided into nine groups of four diseased colonies each. One group was left as a control while each of the other eight groups was treated with a different antibiotic or chemi-

Table 1. The brood counts and surplus honey produced when nuclei in two different apiaries were treated with penicel, gallimycin, or tetracycline. The brood counts were made seven weeks after the treatments were started.

Smith's Orchard Apiary							
Untreated Nuclei		Nuclei Given Gallimycin		Nuclei Given Penicel		Nuclei Given Tetracycline	
Square Inches of Brood	Surplus Honey	Square Inches of Brood	Surplus Honey	Square Inches of Brood	Surplus Honey	Square Inches of Brood	Surplus Honey
717	45.1	801	58.8	726	46.1	891	62.2
328	19.9	1038	45.7	1089	84.1	851	69.1
287	0	687	54.1	756	71.8	992	98.7
334	19.8	669	91.5	654	15.0	456	40.0
512	6.5	467	51.3	212	20.5	726	99.4
772	33.3	818	70.4	713	74.1	593	72.8
981	23.5	415	35.5	748	65.1	974	86.8
900	77.9	990	57.4	428	13.0	269	34.4
366	16.2	654	71.8	696	67.8	682	51.1
450	33.2	377	60.6	906	71.1	377	59.3
Av.564.7	27.54	691.6	59.71	692.8	52.86	678.1	67.38
Horticultural Farm Apiary							
323	17.0	1087	98.8	352	0	331	8.5
256	9.0	539	53.1	460	32.2	159	0
395	19.5	574	61.7	344	0	629	62.1
672	37.4	682	72.9	571	65.1	438	22.0
717	60.2	709	50.0	299	0	69	0
103	0	118	0	441	78.9	401	11.5
212	4.5	835	84.4	301	4.9	206	0
677	40.5	355	0	422	41.9	428	39.2
272	5.5	496	50.0	606	33.9	727	38.8
430	18.0	404	0	440	13.0	220	0
Av.405.7	21.16	579.9	47.13	423.6	26.99	360.8	18.21
485	24	636	53	558	40	519	43
Average both apiaries							

cal. The four colonies in the group receiving tetracycline produced 50 pounds more honey than the next highest producing group. This may have been partly due to the fact that it cured the disease, but four of the other treatments also gave good control of the disease. The group receiving gallimycin produced slightly less honey than the apiary average, probably due to the fact that this material had no observable effect on American foulbrood.

Table 2.—The effect of five different concentrations of gallimycin and erythromycin lactobionate on the longevity of caged adult bees. The parts per million added is figured as active erythromycin. For example, 1 p.p.m. gallimycin actually contained 21.1 parts gallimycin and 1 p.p.m. erythromycin lactobionate actually contained 1.63 grams of this material.

p.p.m. erythromycin added to the food	Gallimycin	Erythromycin Lactobionate
0	21.87	27.69
1	20.50	23.49
10	29.18	24.64
100	26.11	24.71
1,000	12.88	3.98
10,000	5.60	2.53

Summary. Nuclei treated six times with gallimycin averaged 22% more brood in one apiary and 43% more in another apiary. These same nuclei produced 32 pounds more honey in one apiary than similarly untreated nuclei and 26 pounds more in another apiary. Nuclei treated with either gallimycin or tetracycline did not contact European foulbrood, while some colonies in the same apiaries which were untreated or which received penicil broke down with European foulbrood. Moderate doses of gallimycin or erythromycin lactobionate did not adversely affect the longevity of caged adult bees and the gallimycin may have been stimulatory.

Penicil-treated nuclei averaged 23% more brood in one apiary and 4% more brood in a second apiary than similar untreated nuclei. The penicil-treated nuclei averaged 26 pounds more honey than the check colonies in one apiary, 6 pounds more in a second apiary, and 21 pounds more on only three treatments in another apiary in 1955.

Tetracycline-treated nuclei produced 20% more brood in one apiary

and 11% less in a second apiary than the control colonies. The honey production of these tetracycline-treated nuclei averaged 40 pounds more in one apiary and three pounds less in the second apiary. Four colonies treated with tetracycline in 1956 produced more honey than any other group of four colonies given eight other treatments. All colonies in this 1956 experiment had American foulbrood.

Conclusions. More work should be done on all three materials to determine their effect on different colonies at various times of the year, as well as their effect in different areas of the country. The following conclusions can be drawn from these and other studies:

1. Dusting either gallimycin or tetracycline in empty frames and placing these frames next to the brood nest was a satisfactory method of applying these materials. The bees did not clean out all of the penicil from these empty combs.
2. Gallimycin prevented European foulbrood and in other studies it has given good control of early stages of this disease. Gallimycin has not given satisfactory control of American foulbrood. It appears to stimulate colonies to greater brood production and to greater honey production.
3. Penicil has failed to either control or prevent European foulbrood or to control American foulbrood in our studies. It may stimulate the colony.
4. Tetracycline has given excellent control of American foulbrood in our studies. It has also prevented European foulbrood and given good control of this disease. It appears to be nontoxic to the bees in dosage necessary for control and may be stimulatory.

Science Teachers' World

The above magazine in its October 22 edition has a story by Mary Geisler Phillips entitled: "What; Bees are Air Conditioned Experts?"

Mrs. Phillips explains the method of keeping the hive air conditioned, not alone by the fanning of wings, but by the distribution of water within the hive by the worker bees. As the temperature drops the cluster forms, but is always in motion, the inner bees of the cluster exchanging places with those in the interior of the cluster.

A TRIBUTE TO A FRIEND



ARNOLD PARKER STURTEVANT

This tribute to Dr. Arnold P. Sturtevant, Director of the Western States Apicultural Research Laboratory, Laramie, Wyoming, was prepared by William L. Chapman, State Commissioner of Agriculture, and presented by Harley K. Kittle, President of the Wyoming State Beekeepers' Association, at the annual meeting in Worland, December 4, at the banquet in Dr. Sturtevant's honor, marking his retirement on March 1, 1958. He was presented with a sonic transistor radio.

Dr. Sturtevant was born in Denver but received his Bachelor of Arts degree at Clark University. He was a graduate student at M.I.T. and finally received his Doctor's degree in 1923 at George Washington University. He is a member of the Wyoming Chapter of Sigma Xi, National Association of Bacteriologists, Wyoming Association of Bacteriologists.

His professional assignments included Bacteriologist in the Tuberculin Laboratory of the H.K. Mulford Co.; Assistant in Comparative Pathology, Experiment Station in Amherst, Mass.; in charge of bee disease investigations for the Bee Culture Laboratory of the Bureau of Entomology, U.S.D.A.; in charge of the Western States Apicultural Research Laboratory at the University of Wyoming.

He is a modest and unassuming man, endowed with ability and common sense, and knowledge in his chosen field, combined with tremendous physical and mental energy. He has dedicated himself to the task of improving the lot of thousands of beekeepers in this country.

Beekeepers Promote Honey and Publicize National Honey Week

by S. JOAQUIN WATKINS

PRESIDENT OF AMERICAN BEEKEEPING FEDERATION

Much has been said about beekeeper participation in the Federation Marketing Program during the past few years, so my wife and I decided to see how much we could do toward getting Honey Publicity during National Honey Week, using the tools furnished by the Federation (the Display Kit and Information Kits).

The first call was at the desk of Mr. Charles Judson, Grand Junction Daily Sentinel, Farm Editor. He was most cooperative and introduced me to Miss Mary Louise Gibbin, the Home Ec. Editor. The result was an announcement of National Honey Week before the event, a farm section article on the value of bees and honey, plus a picture of the wife preparing Honeyed Chicken—Chinese Style. This picture appeared with several honey recipes on the Sunday Home Ec. page. The Western Colorado Reporter printed seven honey recipes under a nice heading. Honey was also mentioned in several of the store ads. Parts of the Information

Kit were left with the newspapers for their future reference.

A telephone call to one of the local radio stations resulted in a ten minute interview on bees and honey during the June Lee Women's Hour. This was followed later in the week by an announcement of National Honey Week along with some very flattering remarks about the goodness of honey and the value of bees to agriculture all on the Ruby Luton Fruita Hour. Again, parts of the Information Kit were left for future reference.

Perhaps the outstanding feature of the week was a fifteen minute television program on the KREX "In Town Today." This featured samples of honey, an exhibition hive of bees, and an interview on bees and honey by Mr. Bill Clary. Four beekeepers (Gene Sanders, R. O. Green, Grover Sanders and I) appeared on the program. To say the least, this program, coming at the dinner hour, was seemingly seen by everyone on the Western Slope and caused con-

siderable comment. Also, during the week, honey was shown and mentioned in conjunction with several grocer TV ads.

Realizing that during the fall season the Holsum Bread people put on demonstrations of their Brown'n and Serve Rolls, Mr. Dale Hasbrook, supervisor of sales and demonstrations for the area, was contacted and arrangements made for honey and hot roll demonstrations in five area stores. Since we were not honey packers, Mr. J. D. Caldwell of the Caldwell Honey Company was contacted and he had the Corder Distributing Company furnish the honey. The Corder Distributing Company cooperated in every way by distributing the Display Kits and getting larger honey displays wherever possible. Although it is hard to evaluate the over-all results of such demonstrations, at least more honey was sold during the demonstrations than normal and surely many people tasted honey and hot rolls for the first time in years.

In one of the demonstration stores where honey was sold at a bargain price, I understand that a considerable volume of honey was sold. The demonstrator in this store really knew "her honey" and did an excellent selling job. This leads to the conclusion that in order to move honey in quantity from such a demonstration, not only is a good demonstrator necessary, but a special price should be offered (this doesn't necessarily mean a drastic cut in price). In fact, in the store where my wife demonstrated, many customers asked if the honey was "on-sale."

Looking back over the operation one glaring omission was noticed and that was the lack of "model honey displays." Although the Corder Distributing Company was able to increase the size of the displays in many stores, the beekeepers did not have any "Model Displays of Honey and Bee Products" which cause so much general interest. Perhaps we can rectify that this next year.

In conclusion, there is one thing certain, all of the people in this area knew that it was National Honey Week.



Mrs. S. J. Watkins preparing Honeyed Chicken-Chinese style. (Photo from Daily Sentinel)



A PRODUCT
OF CAREFULLY
CONTROLLED
CROSS BREEDING

DEVELOPED FROM
LIGHT 3 BANDED
ITALIANS

1958 PRICES

ANY QUANTITY	ONE PRICE TO ALL
2 lb. package with CLOVERLINE queen.	Shipping Wt. 8 lbs. \$3.75 each
3 lb. package with CLOVERLINE queen.	Shipping Wt. 9 lbs. 4.75 each
4 lb. package with CLOVERLINE queen.	Shipping Wt. 10 lbs. 5.75 each
5 lb. package with CLOVERLINE queen.	Shipping Wt. 14 lbs. 6.75 each
	Extra CLOVERLINE queens 1.25 each

We sell GOOD BEES, explicitly developed for COMMERCIAL honey production, one grade only CROSS BRED CLOVERLINES.

We have no disease and all our apiaries are state inspected. Certificate of Health and Directions for Handling come with every shipment. Live delivery and complete satisfaction guaranteed. Your choice of shipment via Parcel Post, Railway Express or your truck. All packages are FOB Columbia, S. C. Extra Queens sent Air Mail Postpaid.

BOOK YOUR ORDER EARLY FOR CHOICE DATES FROM MARCH 20TH TO MAY 15TH.

CLOVERLINE APIARIES

P. O. Box 5126

Columbia, S. C.

Favorite Recipes

ROLLED SANDWICH

Spread creamed honey butter on cut end of bread loaf. Cut slice of bread thin and remove crust. Sprinkle chopped nuts on honey butter. Roll slice and fasten with toothpick. Seal open edge with honey butter. Cover with waxed paper. Place in refrigerator to chill.

TEA SANDWICH

With a biscuit cutter cut circles from bread slices. Spread circles of bread with softened butter and top with cream cheese softened with honey. On this spread red raspberry jam. Place a dot of cream cheese mixture or whipped cream in the center.

Use circles cut from bread as in above recipe. Toast until brown on both sides. Spread with honey butter. Sprinkle with chopped nuts. Place under broiler until nuts are slightly browned and serve hot.

CREAM CHEESE SANDWICH FILLING

Soften cream cheese with enough honey to spread well. Add chopped raisins or nuts.

FRUIT FILLING

$\frac{1}{4}$ cup each dried prunes, dates, figs, orange peel
1 tablespoon candied ginger
 $\frac{1}{4}$ cup honey

Chop fruit and blend with honey. Use between slices of buttered bread.

COUGH SYRUP

Make 3 pints of strong tea by boiling a good sized bunch of old field balsam in a covered vessel; strain, add $1\frac{1}{2}$ cups of sugar; boil to 2 pints; take from fire; and add a small teaspoonful of pine tar; let cool five minutes, then add $\frac{1}{2}$ cup strained honey. Dose: 1 teaspoonful as often as needed—2 to 4 hours according to the case.

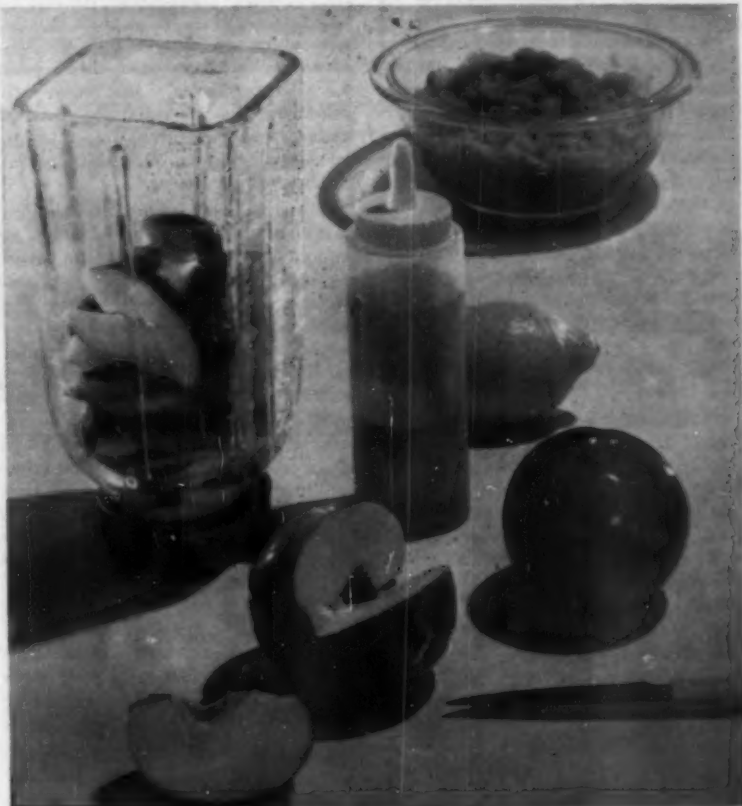
Mrs. A. J. Armstrong
Pocatello, Idaho

HONEY DRESSING

Served on fruit salads is delicious—Beat together $\frac{1}{4}$ cup honey, 3 table-
spoons lemon juice

1 teaspoon salt, and $\frac{1}{4}$ teaspoon

paprika. Add $\frac{3}{4}$ cup salad oil gradually beating all the time. This is good also on cabbage salad. Mrs. Chesley Harbo, Grove City, Minn.



FRESH UNCOOKED APPLESAUCE

"A Honey of an idea."

3 red skinned apples

1 tablespoon lemon juice

$\frac{1}{4}$ teaspoon cinnamon or nutmeg

$\frac{1}{4}$ cup honey or more to taste

Thinly slice cored (peeled or unpeeled) apples. If sauce is to be served uncooked, put prepared apples in bowl of salted water. ($\frac{1}{2}$ teaspoon salt to 1 quart of water). Allow to stand 15 minutes to prevent discoloration. Combine lemon juice, cinnamon and honey. Put one-half of apple cubes into blender or food mill and add fruit juice mixture. Continue adding apples until all have been blended to a smooth sauce. Chill before serving.

1. Super to freeze in ice cube trays. Serve slightly defrosted as meat accompaniment.

2. Personalizes your cake mixes. Prepare your favorite cake mix, using 1 cup of uncooked applesauce. Follow directions found on cake mix box for balance of ingredients and for baking.

3. 1 cup of chilled uncooked applesauce used in place of 1 cup of liquid makes a zesty flavored apple gelatin salad. Apples may be grated on medium size grater.

(Tried and taste-tested by Marilee Ammer, California Honey Queen. She will test new recipes for the California Honey Advisory Board).

Some of you ladies who sent recipes may now perhaps see them in print. Sorry we were so delayed. Good, tried recipes, using honey, are welcome. Those who have not sent recipes do so. Will acknowledge and use them when we can.

ABJ Experimental Apiaries

The Control of Bee Disease with Drugs

We have so often been asked to report what goes on in the American Bee Journal Experimental Apiaries that we have decided to do so. Most readers do not know that we have about a thousand colonies devoted, not only to honey production, but to testing new management methods, new equipment, and new applications of scientific research for the needs of beekeepers. Sometimes articles have been prepared and used in the Journal but no information has been given about how we have gone about deciding the value of what is given to the reader by these articles.

Most of our work in breeding, which has resulted in the production of the hybrid lines now known to beekeepers as Starlines and Midnites, has been done with a skilled research staff headed by Dr. G. H. Cale, Jr., with William C. Carlile, an able and practical beekeeper, as scientific assistant, and other helpers for the work involved. In addition other projects are being constantly initiated and carried to conclusion so the research work is rather large in its scope. Some of it is fairly scientific in approach, and some of it is more in the nature of field tests following the results reported or published by other research groups.

One of our biggest projects has been disease control. Thirty-five years ago American foulbrood was claiming from 10-20% of our colonies most years. It was the day of shaking, a commonly accepted method of reducing disease. No one considered the fact that shaking, which perpetuated both the bees and the queen, was simply a way of perpetuating the disease itself because of the obvious susceptibility of the line.

Then shaking gave way to burning. Whole apiaries were burned when most of the colonies were diseased and so susceptibility was destroyed and also resistance. Finally we stumbled on the thought that resistance was important to preserve. When only the actual diseased colonies were destroyed those that were left did have a degree of resistance and, as we continued burning, the

percentage of disease and the cost of trying to cope with the disease, were also reduced. But there still remained the everlasting hive examinations, the segregation of equipment, and so on, that laid a toll on the cost structure.

About then we began the breeding research starting with highly resistant lines and only choosing breeding stock inside the fence of proved resistance. It was a long step forward but not good enough. The resulting stock did not have high enough honey production and beekeepers wanted production instead of resistance. Then we compromised by retaining a fair commercial percentage of resistance and at the same time building in an improvement in production.

Then came the revolution. The first day Dr. Haseman and L. F. Childers sent their bulletin on the drug sulfa, we rushed to the store for sulfa tablets, then rounded up all the colonies of American foulbrood we could find, set up an isolation yard with state approval and in the very first season cured every case with sulfa.

It was a revelation but also there were reservations. Some colonies again had disease, were cured again, and again had disease until no amount of sulfa had any effect on them. It was obvious that for general use a way had to be found to prevent disease rather than to cure it.

The day this thought came to the usual slow moving thought processes, we began to feed soluble sulfa in syrup to every colony every year. It worked. The percentage of disease dropped way down; almost to nothing. But the cost stayed up not only for management, colony examinations, and cost of materials but for the cost of transportation and labor. Some way must be found to make material costs stay down and remove the cost of special management.

The answer was routine dusting. The cost of materials dropped to a few cents per colony. The heavy cost of syrup was eliminated. Labor and mileage were almost stopped.

By a routine of three dustings of every colony each spring, during other work and colony handling, between the beginning of brood in spring and the time of the honeyflow when supers are given to the bees, the percentage of disease almost became lost from sight. Safeguarded with single comb examination of emerging brood at the time of honey removal and the subsequent destruction of any diseased colonies found, we had licked the problem of American foulbrood.

Research by others with terramycin, which is a slower control for American and a certain one for European, brought an added defense because the use of both drugs together in a single dust automatically controls both diseases, and the war of many years against the greatest enemy of commercial beekeeping seems to be almost at an end. For instance, this past season in trying to establish some resistance records, not a single case of either disease could be found in our outfit. Later two or three cases of American showed up and the combs of these colonies were saved for the breeding work.

The same story of drugs involves adult diseases such as Nosema for which Fumidil was developed by Abbott Laboratories. Other drugs not yet in use are also being investigated. In this issue is an article by Joseph O. Moffett, William T. Wilson and Ralph R. Parker which reports several drug trials. You will note that one in particular is very promising, gallimycin. It shows good control of American but it also introduces another factor in the use of drugs, the stimulation of egg laying and subsequent increase in brood production. How important that will be still remains to be seen.

In our work with sulfa we have made a fair determination of this same effect. Working with over 400 colonies we fed water, sugar syrup, honey, pollen substitutes with and without sulfa. Where ever sulfa was in the feed the brood return was greater. The all-over average increase for the 400 colonies was two combs of brood per colony for the feeding period. Gallimycin may show a more effective increase than sulfa. At least we intend to find out.

PACKAGES with CAUCASIAN Queens

	1 to 24	25 to 99	100 & up
2 lb.	\$4.25	\$4.00	\$3.75
3 lb.	5.35	5.10	4.85
Extra Queens—			
	1.40	1.30	1.20

**HOWARD WEAVER
& Sons**

Navasota, Texas

J. E. WING & SONS

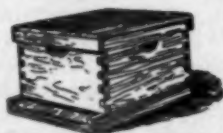
43 Years' Continuous Service

ITALIAN PACKAGES
BEES AND QUEENS
OUR SPECIALTY
Knights Landing, Calif.

Bees and Queens

Send for FREE Circulars
Booking orders now.
Over 30 years a shipper.

BLUE BONNET APIARIES
Weslaco, Texas



BEE SUPPLIES

WRITE FOR 1957 CATALOG

Williams Bros. Mfg. Co.
5205 SE 82 AVENUE
PORTLAND 66, ORE.

LITTLE'S

ITALIAN QUEENS	
1 to 24	\$1.45
25 to 99	1.35
100 and Up	1.25

Until June 15

ROYAL JELLY

Bulk & Capsules
Write for prices

LITTLE'S APIARIES
Shelbyville, Tennessee

BETTER BRED QUEENS

THREE BANDED ITALIANS

CALVERT APIARIES, Calvert, Ala.

PACKAGES

"Gulf Breeze"

QUEENS

We solicit inquiries on package
bees and queens for spring de-
livery. Our personal attention to
all inquiries.

BESSONET BEE COMPANY
Donaldsonville, La.

Happy New Year

Resolved - To Do Our Best
To Make You Happy With

60 lb. Cans

Handled By Best Jobbers

Made By

THE CONNEAUT CAN CO.
CONNEAUT, OHIO

QUEENS

Italians Caucasians

	1 - 24	25 - 99	100 up
2 lb. pkg. w/q.	\$4.30	\$4.25	\$4.00
3 lb. pkg. w/q.	5.40	5.30	5.10
Nice large queens	1.25	1.15	1.05

Again this season we have enlarged
our queen yard to fill your orders
promptly, so send us your order of
1 or 1000. Producer of Royal Jelly.

MITCHELL'S APIARIES
Bunkie, La.

HONEY WANTED

Cut Comb and Extracted
Advise what you have

T. W. BURLESON & SON
WAXAHACHIE TEXAS

ITALIAN

Package Bees and Queens

John S. Shackelford
Rio Oso, California

FREE . . .

A Sample Copy

"Gleanings in Bee Culture"
Look It Over - You Will Like It

A. I. ROOT CO., Medina, Ohio



Carniolan and Caucasian QUEENS

1957 nearing close, I desire to thank my
customers for their patronage and pa-
tience in filling their orders during the
wettest season on record according to
weather bureau report. Increasing out-
put again to try to meet the increased
demand for Carniolan and Caucasian
Queens. They are the answer to gen-
tleness and production. Booking orders
for (queens only) for early March 1958.

W. D. REAMS

Box 87 La Belle, Fla.

BRITISH BEE JOURNAL

Appears every two weeks
Subscription \$3.25 per annum
payable in advance

Keep Up-to-Date in Beekeeping
by taking out a subscription now
through our agents.

AMERICAN BEE JOURNAL

STARLINE and SELECT ITALIAN

QUEENS PACKAGE BEES

M. C. WEST

Rt. 1, Box 279A
WINTERS, CALIFORNIA
Phone or Wire Woodland, Calif., MO-2-5782



**DADANT'S STAR-
LINE HYBRIDS** and

Wicht's Three-Band-
Italians.

WICHT APIARIES

406 Miller St. Hattiesburg, Miss.
"Quality, Service and Satisfaction"

"Packages for '58"

D. T. WINSLETT

7736 Auburn Rd.
Citrus Heights, Calif.

Italian Bees - Queens

Quality and Service guaranteed
to please.

SUNRISE APIARIES

Box 166, Petal, Mississippi

Thank You

For a Successful Season

REMEMBER—

QUALITY QUEENS FOR '58

J. C. RIVES

P. O. Box 1288 Phone CH 1-4301
REDDING, CALIFORNIA

MEETINGS



HERE and THERE

Early Please

Winnebago Honey Farm, Oshkosh, Wisconsin, says that often information about meetings appears too late to be of any value because the Journal may be received even after the meeting has occurred. To avoid this will you secretaries, or others who send meeting news, do this: For meetings that will take place the first half of the month, make sure the information gets into the issue of the month before (example, for news of a meeting on the 5th of January notice should be in the December issue and be here by the 20th of November). For meetings after the 15th of the month we should get the announcements before the 20th of the month of publication (example for a meeting January 18th, we should have the announcement before the 20th of December).

University of Minnesota
Farm and Home Week Program
January 14 - 17

TUESDAY, JANUARY 14—

P.M.

- 1:45—Getting Acquainted with Bees and Beekeeping, H. M. Haydak.
- 2:45—Beekeeping, an Attractive Occupation, C. D. Floyd.
- 3:45—Beekeeping Problems—discussion

WEDNESDAY, JANUARY 15—

A.M.

- 9:00—Inside the Hive, M. H. Haydak.
- 10:00—How to Get Started in Bees, C. D. Floyd.

P.M.

- 1:45—Feed Your Bees Right, M. H. Haydak.
- 2:45—Know your Honey, Ester Y. Trammell.
- 3:45—The Most Important Bee, K. W. Tucker.

THURSDAY, JANUARY 16—

A.M.

- 9:00—Getting Better Honey Crops, M. H. Haydak.
- 10:00—Honey from the Bees to the

Consumer, C. D. Floyd.

P.M.

- 1:30—Wings of Agriculture, K. W. Tucker.
- 2:30—Bees Have Dysentery Too, T. A. Gochbauer.
- 3:30—Hazards of Beekeeping—Forum with questions, C. D. Floyd, M. H. Haydak, T. A. Gochbauer, K. W. Tucker.

FRIDAY, JANUARY 17—

A.M.

- 9:00—Holst Milk Test for American Foulbrood, T. A. Gochbauer.
- 10:00—Bees and the Farmers, T. A. Aamodt.

P.M.

- 1:45—Fall Management and Wintering, M. H. Haydak, C. D. Floyd.
- 2:45—Movies, Questions.

Midwestern, Kansas City, January 12th

The Midwestern Beekeepers' Association will meet at the I.O.O.F. Hall, 812 Westport Road, Kansas City, Missouri at 2:30 P.M., Sunday, January 12, 1958. On the agenda will be the installation of the new officers for the year, followed by a general discussion of beekeeping and a picture pertaining to beekeeping. Refreshments served by Ladies Auxiliary. Everyone welcome.

J. F. Maher, Secretary.

National Honey Show
Tampa State Fair, Feb. 4 - 8

FANTASTIC YET TRUE—

Honey brings \$1.25 per lb.;

Comb Honey \$2.50 per section

Eighty-four 1 lb. jars of honey will return \$1.25 each to their producers at the Florida State Fair during the National Honey Show in Tampa Feb. 4th through 8th, 1958. Six sections of comb honey will bring someone \$2.50 per section. Six 2½ lb. jars of chunk honey will return \$2.50 per jar. The next place, six jars of chunk and section comb will bring \$2.00 each. In fact, you may go on down to sixth place and yet receive more than retail price for your product. More than 500 jars will win cash prizes above their retail value.

Imagine! 5 lbs. of beeswax will bring \$3 a pound, another 5 lbs. will bring \$2.40, and even 6th place wax will bring 80 cents a pound.

Think of one dozen cookies bringing \$5.00, or 12 pieces of candy for \$5.00.

Also, for the winner of each class there will be an engraved 13 inch silver plated bread tray, and in addition, the Sweepstakes winner will get a beautiful centerpiece bowl. And on top of that, the Hazel Atlas Glass Division of Continental Can Co. has just agreed to award a 44 piece set of their "Tempo" tableware for the winner of each class. Where else can you get so much for your honey? All winners 2nd through 6th place will get ribbons to prove it, and there are 78 in all to be awarded.

THESE POSSIBILITIES EXIST ONLY IF YOU ENTER YOUR EXHIBIT SO THAT IT REACHES THE FLORIDA STATE FAIR (HONEY EXHIBIT) TAMPA, FLORIDA NOT LATER THAN 5:00 P.M. FEBRUARY 3, 1958.

If you need further information, write at once to Robert Banker, Cannon Falls, Minn., or to Fred Oren, 2516 Silver Lake, Tampa 4, Fla. Millard Coggsahall of Minneola, Fla. will attend the ABF convention at Columbus and has offered to transport entries brought to Columbus to the Show. If those who would plan to send honey in this way would contact him as to the amount they plan to bring it would enable him to plan for the load.

Fred Oren, Superintendent,
National Honey Show

Norfolk County (Mass.)
Walpole, Jan. 13

The Norfolk County Association will hold its next meeting on Monday, January 13, 1958 at 7:30 p.m., at the Norfolk County Agricultural School, Walpole, Mass. Start the New Year right! Come and bring your friends and enjoy a good program. Happy New Year to All.

Edith L. Colpitts, Cor. Sec.

FIFTEENTH ANNUAL CONVENTION
American Beekeeping Federation, Inc.
Neil House, Columbus, Ohio — January 27 - February 1

As announced in December, advance registration is offered if paid to the Arrangements Chairman, PO Box 885, Springfield, Ohio. So far few have taken advantage of this plan. Advance registration covers registration and banquet ticket for one person. Price \$5.00. And please do send money order or check. One has been received with a five dollar bill between a thin sheet of paper!

Program

Saturday, January 25th

10:00 A.M. Executive Committee meeting.

Monday, January 27th

9:00 A.M. Advance Registration.
 9:00 A.M. National Honey Packers and Dealers Assn.

9:00 A.M. Apiary Inspectors of America.

C. D. Floyd—President
 9:00 A.M. American Beekeeping Federation Directors Meeting.

S. J. Watkins, President.

1:30 P.M. Directors of American Honey Institute.

R. F. Remer, Chairman.

1:30 P.M. Research Committee Meeting.

Clarence Benson, Chairman.

8:00 P.M. Honey Industry Council of America.

Roland Stone, Chairman.

8:00 P.M. Research Committee Meeting.

Clarence Benson, Chairman.

Tuesday, January 28th

8:00 A.M. Registration.

9:00 A.M. General Session, Call to order.

Presentation of Colors
 Invocation—

Rev. Joel Lunsford
 Musical Number

9:30 A.M. Address of Welcome—
 Dr. James R. Hay, Director of Agriculture—
 State of Ohio.

Response—
 Ray Reed, Vice President American Beekeeping Federation.

10:30 A.M. President Address—
 S. J. Watkins, President
 —American Beekeepers Federation Inc.

10:50 A.M. Keynote Speech—
 "Industry Wide Cooperation"—Woodrow Miller.

Committee Appointments and Announcements.

(Bees accomplish through cooperation—SO CAN WE!)

1:30 P.M. "Honey Exhibit at the A.N.U.G.A. in Cologne, Germany." Marvin Webster, Fruit and Vegetable Division, U.S.D.A. Washington, D.C.

2:15 P.M. The Check-Off System, A Complement to the Honey Price Support Program—A. A. Greenwood, Sugar Division, U.S.D.A.

2:40 P.M. "The Loan and Purchase Agreement Program for Honey" Harold J. Clay, Sugar Division, United States Department of Agriculture.

3:00 P.M. "Royal Jelly from the Producer's Viewpoint," Leslie Little, Little's Apiaries, Shelbyville, Tenn.

3:45 P.M. "Royal Jelly—Its Uses," R. B. Willson, R. B. Willson Inc., 250 Park Ave., New York, N.Y.

4:30 P.M. Bee Association Meeting—Robert Dadant President. (Industries)

8:00 P.M. "500" Club—Henry Piechowski, Chairman.

8:00 P.M. Hobbyists Meeting, A. R. Dean, Chairman. Suggestive subjects to be treated: Handling of Hybrid Queens—
 Spray Poisoning—
 Royal Jelly and its Possibilities.

Wednesday, January 29th

7:30 A.M. State Membership Chairman—Breakfast Meeting.

9:00 A.M. Research Program, Clarence Benson, Chairman.

10:30 A.M. Allergies Due to Bee Stings—G. F. Townsend, Professor of Apiculture, Ontario Agriculture College, Guelph.

11:15 A.M. The Composition of American Honey—a Progress Report—Dr. J. W. White, Honey Research Service, Beltsville, Maryland.

11:45 A.M. Reading of Resolutions—Newman I. Lyle, Chairman.

1:30 P.M. "How the Dairy Industry Raises Funds for Their Promotion Program."

Myron W. Clarke, American Dairy Association.

2:15 P.M. Check off Plan—Panel Discussion—

Ken Bradshaw—Moderator. Panel Members—
 R. F. Remer
 Roland Stone.

4:00 P.M. "Plants Suitable to Retain Highway and Railroad Banks"—

Edwin J. Anderson—
 Penn State University.

4:30 P.M. "Honey and Pollen Plants"—Harry Lovell, Louisville University.

8:00 P.M. Spray Problem Committee Meeting—H. L. Maxwell, Chairman.

8:00 P.M. Teachers Extension Specialist and Research Workers at State Level.

Thursday, January 30th

9:00 A.M. Honey Promotion, Marketing Committee Chairman—C. D. Floyd.

9:10 A.M. "Merchandising Methods Applicable to Honey Marketing," George Goldsborough, Market Development Branch, United States Department of Agriculture.

9:40 A.M. Panel Discussion—"OUR Honey Market"—C. D. Floyd, Moderator. Panel Members, R. B. Willson, Export Market, R. F. Remer, Coop Marketing, Roland Stone, Independent Packer, Irvin Stoller, Producer-Packer.

10:30 A.M. "The American Honey Institute Promotes Honey," Mrs. Harriet M. Grace, Director, American Honey Institute, Madison, Wis.

10:55 A.M. "Honey Marketing Needs Good Merchandising" Harold Driscoll, Wallace Lindemann Inc., Grand Rapids, Mich.

11:30 A.M. "A Proposed Marketing Program for 1958," C. D. Floyd, Marketing Committee Chairman.

1:30 P.M. Business Meeting—
 Financial Report—Robert Banker, Secy.-treas.
 Committee Reports
 Election of Officers.

7:30 P.M. Annual Banquet—

Dr. E. J. Dyce, Toastmaster. (Good eats, Music, The high light of the Convention.)

Friday, January 31st

9:00 A.M. Directors Meeting—
American Beekeeping Federation.

2:00 P.M. Honey Industry Council of America, Roland Stone, Chairman.

8:00 P.M. Executive Committee Meeting, American Beekeeping Federation.

**TWENTY FIRST ANNUAL MEETING
OF AMERICAN BEEKEEPING
FEDERATION AUXILIARY**
at Neil House, Columbus, Ohio

PROGRAM—

January 27 through February 1, 1958
Tuesday, January 28, 1958—

1:00 P.M.—

—PARLOR O'NEIL HOUSE—

Greetings from OHIO Auxiliary

Talk— Mrs. Alan Root, Medina, O.

1:30 P.M.—

**BOARD BUS for GOVERNOR'S
MANSION.**

2:00 P.M. to 4:00 P.M.—

Tea and Tour of Governor's Mansion.
Wednesday, January 29, 1958—

10:00 A.M. to 2:00 P. M.—

'LADIES'—Behind the scenes Tour
at Lazarus Department Stores.

Thursday, January 30, 1958—

11:00 A.M.—

Luncheon—Junior Ball Room.

Invocation: Mrs. Winston Dunham,
Vice Pres., Ohio Auxiliary, Columbus, Ohio.

Introductions—Mrs. Newman Lyle,
President, Sheldon, Iowa.

Welcome—Mrs. Emerson Long,

President, Ohio Auxiliary, St.
Paris, Ohio.

Response: Mrs. Thelma Littlefield,
Vice President, Pasadena, Calif.

Address—"The Institute and the
Auxiliary"—Mrs. Harriet Grace,
Director American Honey In-
stitute, Madison, Wisconsin.

Talk—"Choosing the Honey Queen
the 4-H Way," Mrs. Esther Pie-
chowski, Red Granite, Wisconsin.

Introduction of: "Honey Queens."

BUSINESS MEETING—

Secretary's Report

Treasurer's Report

Roll call by states

Committee Reports

Marketing—Mrs. Martha Soder,
Stratford, Iowa.

Pins—Mrs. Thelma Littlefield,
Pasadena, California.

Auditing

Old Business

Election Officers—

Mrs. H. A. Schaefer, Chairman,
Nominating Committee.

Vermont Annual

The annual winter meeting of the Vermont Association will again be held in conjunction with the Vermont Farm Show, Inc., at Barre, on February 11th. The beekeepers' luncheon and meeting will begin at 12:30 p.m. at the County House Restaurant; turkey dinner, \$1.75. Among the afternoon speakers will be Gravely, Eastern Branch Manager of the A. I. Root Co., and Mr. Tompkins of the Vermont Department of Agriculture. Everyone is welcome whether beekeepers or those interested in nature or in agriculture.

Clyde N. Wood, Sec.
South Woodstock

**Wyoming, Montana and
Colorado Meetings**

During early December, a series of three state beekeepers meetings was held at Worland, Wyoming; Billings Montana and Denver, Colorado. All three meetings were very well attended. At the banquet of the Wyoming meeting, Dr. A. P. Sturtevant was honored for his many years of service with the Laramie Station, of the U. S. Bee Culture Laboratory, since he will retire next March 1. The Master of Ceremonies at the banquet was William L. Chapman, Commissioner of Agriculture.

The banquet at the Montana meeting was entertained by Lawrence Buhmann, who showed movies taken on his trips to Alaska and Yellowstone Park.

At Denver the banquet speaker was Dr. Kenneth Perry, of Greeley, Colorado, who spoke very entertainingly on hobbies and leisure time occupation.

Among other activities, all three meetings passed a resolution to be presented to the American Beekeeping Federation and the Honey Packers and Dealers Association requesting that the check-off plan be made automatic in operation. Under this system, the honey buyer would deduct 1c per can from any producer's check, add 1c per can as his own contribution, and put the money into the National Fund by buying stamps in that amount. It was the feeling at all three meetings that the only way the check-off plan can be a success is to make this deduction automatic.

Out of state speakers at these meetings included S. Joaquin Watkins, President of the American Beekeeping Federation, Bob Dadant of Hamilton, Illinois, Dr. A. P. Sturtevant, of Laramie, Wyoming, and Ralph Stone, of Denver.

BEEES

INSURE

BETTER

INCOME

MARSHFIELD MFG. CO.

MARSHFIELD

WISCONSIN

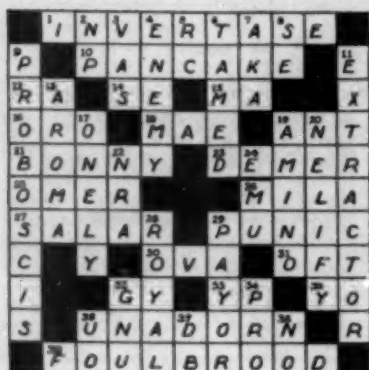
Wholesale

—

Retail

**When you produce COMB HONEY in
SECTIONS. The most profitable way
for beekeepers.**

**Write for our free catalog and
be convinced.**



December Puzzle

The last of a very interesting series by our clever Puzzle Editor, Pat Diehnelt (see page 3). This one is harder than the November puzzle which brought 119 answers from 35 states, with 36 right answers. It drops on this last one to 17 answers from 15 states, only 9 right. One joker is on our lettering from Pat's original. Twenty-three across (hesitate) is "demur." It is lettered "demer." It did not trip anyone however. Also Henry Down, Kincardine, Ontario, calls us on 20 down, "nullify." In the big book it is "nullify." So Pat, you goofed. He also questions some of the words which do not appear in the big book in the regular spellings, like 29 down, "payor." It is "payer" in the regular definition but in the list of supplementary spellings at the base of the page it is "payor." Henry really tore the puzzle apart. Well, let's all shake hands and thank Pat for a wonderful party. Hope you like her Scramble just as much.

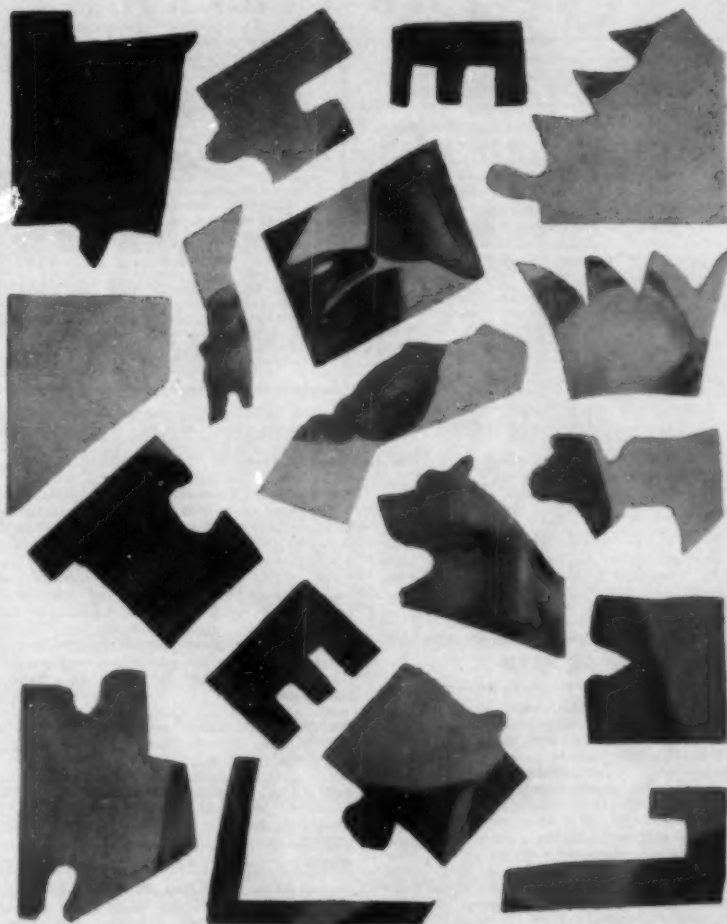
Winners For December

Delaware—Marion Frasher, Wyoming
Kentucky—O. R. Myers, Louisville
Maine—Donald N. Herring, Dover-Foxcroft
Maryland—John A. Fraser, Bethesda
Massachusetts—Walter R. Averill, Edgartown
Ontario—Henry J. Down, Kincardine
Tennessee—Robert Bergeron, Memphis
Virginia—Hunter Sipe, McGeheysville
Washington—J. H. Pister, Jr., Wapato

Italians

Queens \$1.25 ea. — Bees \$1.00 per lb.
Cages 50c — Royal jelly by contract
Nassau Bee Co. Hilliard, Florida

PAT'S NEW PUZZLE FOR 1958



The Scramble

Here's a new venture into the land of fun that is sure to win the efforts of the men, their wives and their children. The Scramble was suggested by Julius Anderson, State Entomologist of Missouri, Jefferson City, and it was passed on at once to our Contest Editor, Pat Diehnelt. She has twelve pictures of prominent leaders in the beekeeping industry and she will cut the pictures up, scramble the parts into a regular puzzle which you must put together.

Some trouble may be encountered in fitting the pieces together after they are cut out of the page because the paper is thin. A good cutting tool is a sharp razor blade. Since there are ads on the reverse side all you need to do, ad-wise, is to place an order with the advertiser and then he won't care if his ad is mutilated (ha!). You won't have to send in a paste up although you may prefer to do so. We would like it better but the contest is not based on it.

The solution is based on answers to these questions: Who is the scrambled person? Where does he live? What is his occupation or position in the industry? What is he best known for? Finally—you bestow a title on the person; for instance, let's take our Editor, GH, might give him the title of "World Wide News Hound." Get it? Not the person's real title but one you think fits his activities.

Pat will judge your answers. Best one a three year subscription to the Journal and the choice of any of our books (list will be sent). Second, a two year subscription. Third, a one year subscription. Then four runners-up at four months each.

Here we go—happy landing!

-The Market Place-

BEES AND QUEENS

ITALIAN BEES AND QUEENS. Dadant's Starline Hybrids and our regular strain. Write for prices. Almarance Bee Co., Geo. E. Curtis & Sons, LaBelle, Fla.

ITALIANS—Packages. Queens. Martz, Rt. A2, Box 846, Vacaville, California.

CAUCASIAN QUEENS "Orloff." Bred from pure and hardy stock in the natural way. Reared few queens per colony only, but vigorous. All queens pure mated, tested. For information write, Oriowski Bee Farm, 710 Cooper Street, Ottawa 1, Canada.

BRIGHT ITALIANS: 3 lbs. with Queen, \$4.75, 2 lbs. with Queen, \$4.00, Queens, \$1.25, Sheppard Apiaries, Aberdeen, North Carolina.

3 BAND ITALIAN and Carniolan Bees and queens. Luther Pickett, Efland, North Carolina.

CARNIOLAN AND CAUCASIAN, 2 lb. package \$4.00 each, 3 lb. package \$5.00 each, Untested Queens \$1.00 each, Booking orders for '58. Tillery Brothers, Greenville, Ala.

FOR SALE

ROYAL JELLY. Nationally known "Apl-Vitalax" brand, hi-potency Royal Jelly products. Capsules and Beauty creams. Wholesale distributors and agents sought everywhere; particularly among Beekeepers. Big profits available. Write airmail for prices and literature. "Apl-Vitalax" Dept. ABJ, Box 6674, Medical Center Station, Dallas 19, Texas.

FOR SALE—Royal Jelly and The Little Queen Royal Jelly Extractor. Royal Jelly Enterprises, 1017 Los Carneros Avenue, Napa, California.

COMPLETE COMMERCIAL honey producing business in South Florida consisting of 1000 hives, bees on location, extracting plant, trucks, extra equipment, supplies and other items too numerous to mention. Excellent locations in orange and one of the best queen rearing sites in U.S. Terms to interested buyer. Inventory on request.

COMPLETE COMMERCIAL honey producing business in Western, N.Y. consisting of 300 hives ready for winter, 30 acres land with new extracting plant, excellent locations. Box RB c/o American Bee Journal.

AGE FORCING me to see all my bee equipment. Everything needed to run 200 colonies. Inspection guaranteed, time of sale, in excellent condition. Joe Angell, 49930 N. Gratiot, Mt. Clemens, Michigan.

ROYAL JELLY capsules 50 MGS. 30 capsules \$5.00, 15 capsules of 100 MGS \$7.00, John Pierson, 1827-42nd Ave., San Francisco, California.

FOR SALE. Fully equipped package bee van and truck for 880 packages. 1954 Mercury V8, 172 w.b., 36,000 miles, 10 speeds with overdrive. Extras. Duty paid for use in Canada and U. S. Also Hopper hive loader for same truck. 12 volt 4 way hydraulic leveling. C. Elmer Morgan, 118 West Dela Guerra St., Santa Barbara, California.

Copy for this department must reach us not later than the tenth of each month preceding date of issue. If intended for classified department it should be so stated when advertisement is sent. Rate of Classified advertising—16 cents for each word, letter, figure or initial, including the name and address. Minimum ad, ten words.

As a measure of precaution to our readers we require reference of all new advertisers. To save time, please send the name of your bank and other references with your copy.

Advertisers offering used equipment or bees on comb must guarantee them free from disease or certificate of inspection from authorized inspector. The conditions should be stated to insure that buyer is fully informed.

LARGE COMB honey outfit. Some extracted equipment. Idaho's best producing area. Mrs. Fred Robinson, 563 Fifth St. S., Nampa, Idaho.

NEAR TRACY, California the heart of rich San Joaquin Valley. Old, established honey business. Seven acres fronting highway. 2 good houses, storage shed, large garage workshop and 30x100 modern cement block honey house. Opportunity to take over going concern. Owner will assist in starting with over 30 locations. Excellent money maker. \$20,000 with \$7,000 cash down. 1000-10 frame hives and all equipment may be purchased separately. George Curran 606 W. 11th St., Tracy, California.

30 COLONIES. These are good colonies in good ten frame hives. Ralph Taylor, Louisville, Illinois.

FOR SALE: 900 Colony Bee Outfit in north central Montana. Write Box R.H. c/o American Bee Journal, Hamilton, Illinois.

HONEY and BEESWAX WANTED

WANTED—Extra white and light amber honey. Let us ship you the containers. Sell us your honey for CASH on delivery. The Hubbard Apiaries, Manufacturers of Bee Supplies and Comb Foundation, Onsted, Mich.

WE ARE PAYING top market prices for beeswax. Ship to any one of our plants: Sioux City, Iowa; Lima, Ohio; Rogers, Texas; Waycross, Georgia; Anaheim, California. Slough Honey Association, 509-11 Plymouth St., Sioux City, Iowa.

WRITE FOR SHIPPING TAGS and current quotations on rendered beeswax. Any amount from one pound up bought. If you have 25 pounds or more, save 25% by letting us work it into foundation for you. Walter T. Kelley Co., Clarkson, Ky.

WANTED: White, Extracted and Buckwheat. Send sample and price. Traphagen, Hunter, N.Y.

WANTED: To buy truck load white honey. Please send best price. Ben Hughes & Son, 2824 So. Belt, St. Joseph, Mo.

HONEY FOR SALE

WHITE CLOVER HONEY in sixties. John A. Sheehan, Falmouth, Ky.

PURE TUPELO and wild flower in 60's. Honey candy. En-R-G Foods, Inc., P. O. Box 232, Lancaster, Pennsylvania.

LARGE QUANTITY light amber unheated honey in steel drums with removable heads. York Bee Company, Jesup, Ga.

HONEY LABELS

Improved designs, embodying color, balance, simplicity, and distinction. Please send for free samples & prices.

C. W. AEPPLER COMPANY
Oconomowoc, Wisconsin

CLOVER HONEY, sixties or drums, **NORTH CENTRAL HONEY PRODUCERS LEAGUE,** Route 2, Beloit, Wisconsin.

WHITE TO WATER white, sweet clover honey in good used 60's in car load lots, or truck loads. J. D. Overbey, Bruce, South Dakota.

30 TONS WHITE clover honey. By can or truckload, Clarence Jenks, Canandaigua, New York.

30,000 lbs. or more, of light clover honey. Silver Hive Apiaries, Glenwood, Minn.

MICHIGAN'S FINEST WHITE CLOVER HONEY. New Sixties. Fully ripened. You'll be pleased. Sample 30c. John McCall, Tecumseh, Michigan.

SUPPLIES

WRITE FOR CATALOGUE. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Beekeepers' Supplies, Onsted, Mich.

BRAND MELTERS and all kinds of bee supplies. Catalogue free. Hodgson Bee Supplies Ltd., 565-13th Ave., New Westminster, B. C.

THE BIGGEST BEE SUPPLY CATALOGUE PUBLISHED (64 pages) free for the asking. Big factory manufacturing a complete line of wooden goods, comb foundation, metal goods, veils and gloves, carloads in stock, daily shipments, save 20% **WALTER T. KELLEY CO., CLARKSON, KY.**

MAKERS of Robinson plain and WAVY-WIRED foundation. Also render and buy beeswax. Order direct from manufacturer and save dealer costs. Shipping tags free. Wax Workers, Inc., Ithaca, New York.

SUPERS \$1.00, Four-crest COVERS AND BOTTOMS \$75 FRAMES 1M \$80.00, 3M \$75.00, 10M \$70.00. Write for price list. Johanson's Bee Farm, 11360 Redwood Highway, Healdsburg, California.

CLOSE OUT—New Factory made 8 Frame Equipment. 17 Metal Roof Covers Hives, packed 1 in a carton \$5.00 each, 50 Bottom Boards, packed 5 in a carton, \$1.00 each, 185 Hive Bodies, packed 5 in a carton \$1.25 each, 15 Metal Roof Covers with Inner Covers, packed 5 in a carton \$2.00 each, 65 Sh. Ex. Super Shells, 6 1/2" depth, packed 5 in a carton \$1.25 each, 15 Style Four Super Shells, packed 5 in a carton \$75 each. Material subject to prior sale. A. G. Woodman Co., Grand Rapids 4, Mich.

WANTED

WANTED: To buy on honey crop payments, 500 to 1500 colonies in good 10 frame equipment with supers. To be operated in good water white honey producing territory. Dakota Apiaries, 809-2nd Ave., West, Dickinson, North Dakota.

WANTED used 45 or 50 Frame Simplicity Extractor, E. F. McClain, 13491 Lacey Blvd., Hanford, California.

WANTED to trade 2 lb. packages for Brood Frames. What have you? D. P. Green, 1136 E.N.Y.-Ave., Deland, Florida.

WANTED about 400 bee colonies 2 or 3 stories complete. California or neighboring states. Sandor Meszaros, 2409 Sixth Ave., Arcadia, California.

WANTED: Experienced queen breeders and beekeepers. Give full information in first letter. York Bee Company, Jesup, Ga.

WANTED TO BUY 500 colonies apiary on a good honey location, preferably in Midwest or south. Can pay cash. Detail offers. Mr. Arpod Osterreicher, 1245 N. Vine St., Hollywood 38, California.

WANTED 300-2 lb. packages with clipped queens. Ben Hughes, 2324 So. Belt, St. Joseph, Mo.

SEEDS AND PLANTS

"HONEY PLANTS—Ask for illustrated 1958 catalog. One packet seed each 6 unusual honey plants \$1.00, Vitex negundo, one year plants, 4 for \$2.00, dozen \$5.00. Pellett Clover root divisions, 25, \$2.00; 100, \$3.00, postpaid. Pellett Gardens, Atlantic, Iowa.

POSITIONS and HELP WANTED

HELP WANTED—Seasonal, year around. Experienced or inexperienced. In Texas, North Dakota. Stewart Apiaries, Trenton, Texas.

HELP WANTED, Experienced help. Excellent wages paid. Also one inexperienced helper. M. E. Ballard, Roxbury, New York

WANTED: Two men for 1958 package season. Write for full information, giving experience, references, age and height. Howard Weaver, Navasota, Texas.

WANTED: A MAN capable of raising 1000 queens for Nucs in South Texas. Have 500 old hives in south to work with. Good Wages. Expenses and truck furnished. If you are not reliable or drink don't answer. Also considering the right man to operate these in central Minnesota. Locations and honey house established. Good wages plus percentage override on the entire crop for the right man. Must have a man February

1st. Write box RH c/o American Bee Journal, Hamilton, Illinois.

HOLLAND-DUTCH Beekeeper, with American experience wants to take over, bees and equipment on share basis. California preferred. Write, Frank Vlaming, Route 1, Box 788, Modesto, California.

WANTED: Dependable bee men, good salary, modern 5,000 colony outfit, also modern housing furnished if desired, seasonal, or year around work. James E. Bunch, Sunnyside, Washington.

WANTED: Experienced man for queen and package production. Seasonal or year around. Lionel Hopkins, Maringouin, La.

WANTED: Two or more experienced bee men for coming season. Good wages and opportunity for right man. Give experience, age and reference. Bees located in Arizona, Idaho and North Dakota. Powers Apiaries, Parma, Idaho.

MISCELLANEOUS

THE AUSTRALASIAN BEEKEEPER—The senior beekeeping journal of the Southern Hemisphere provides a complete cover of all beekeeping topics in one of the world's largest honey producing countries. Published monthly by Pender Bros. Pty. Ltd., Box 26, P.O. Maitland, 3N, N.S.W., Australia. Subscription by Bank Draft or International M.O. 12/- (approx. \$2.15) per year, post free. Sample copy free on request.

BEES REMOVED FROM house or tree to hive without touching either house or bees. Bees will then move honey into hive. Save property, honey and bees with my method. Send \$2 for details. Satisfaction guaranteed. George Hawkins, Rt. 1, Lawson, Mo.

KNOW Interesting facts about the bees of India through the INDIAN BEE JOURNAL, published in English by the Bhupen Apiaries (Himalayas), Ramgarh Dist. Nainital, U.P., India, and obtainable from them. Sub. Rs 0/-, or \$1.15/-, or \$2.25 yearly. Sample copy, post free, Rs. 1/-, or \$1.25 or 40c (International money order). Payment in mint postage stamps of your country accepted.

ROYAL JELLY box of 30 capsules with 50 milligram Royal Jelly per capsule \$4.35 to beekeepers retails for \$8.50, box of 1000 in bulk \$125.00 postage paid in the United States. A. Tennenhouse, Prairie View Honey Co., 12303-12 St., Detroit 6, Mich.

RANCH MAGAZINE—Do you find it difficult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more sheepmen with more information of range sheep than any magazine published. Subscription 1 yr., \$3.00; sample copy 25c. Box 199, San Angelo, Texas.

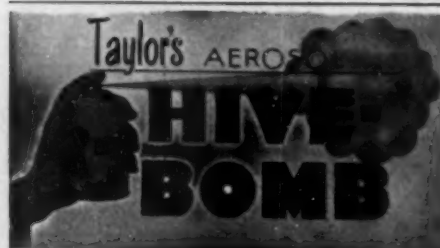
ROYAL JELLY BEAUTY CREAM in 1/4 oz. jar \$1.50 to beekeepers, retails for \$3.00 - 1 oz. jar \$2.00 to beekeepers retails for \$4.00 - 2 oz. economy size \$3.50 retails for \$7.00. Prairie View Honey Co., 12303 12th St., Detroit 6, Mich.

For Sale

Successful bee business producing over 200,000 lbs. of water white honey per year. Best locations in Midwest. Will sell all or part. Includes 1500 colonies of bees, supers, buildings, machinery and truck, all in top condition. Bees of finest stock with ample stores. Write or phone.

R. W. BARNES and SON

Oakland, Nebraska



Bee Calm with TAYLOR'S HIVE BOMB

The Push Button Bee Smoker

\$129 plus freight at your dealer's

- no sparks
- no heat
- no fire hazard
- a puff's enough

Stewart Taylor, Camargo, Illinois

*Trademark

Make Your Own FACTORY TYPE HIVES

And SUPERS with SAMSON CORNER JOINTS. Only a bench saw and hand tools required. Our low cost Copyrighted BLUE PRINTS and INSTRUCTIONS cover everything and can save you many dollars. Write for full particulars. E. R. TAYLOR, Malcom, Iowa.

Selected Italian Package Bees and Queens

WRITE FOR PRICES

GENE W. STILES

501 W. 8th St. Davis, Calif.

Dear Customers:

We wish to take this opportunity to thank you for the business that you have given us in the past. We are booking orders now for 1958 shipment, so please let us have your order as soon as possible. Thank you.

Carlus T. Harper, New Brockton, Ala.

Packages with

MIDNITE HYBRID QUEENS

	1 to 24	25 to 99	100 & up
2 lb.	\$4.55	\$4.30	\$4.05
3 lb.	5.65	5.40	5.15
Extra Midnite Queens ..	1.70	1.60	1.50

Howard Weaver & Sons

Navasota Texas

ITALIAN BEES and QUEENS

3 lbs. with queen	\$4.05
4 lbs. with queen	\$4.90
Extra Queens	\$1.10
Deduct \$1.10 for queenless pkg.	
Live Delivery and health certificate guaranteed.	

DAIGREPORT APIARIES
Hessmer, La.

25 cents for 8 - 9 oz.

of your honey in our plastic
comb honey version

COBANA PROD. CO.

P.O. Box 214 Dearborn I, Mich.

American Rabbit Journal

Shows the Way to Success

The leading Rabbit Farming Magazine.
Explains the growing meat rabbit industry.
Non-fancy. Est. 1931. 3 years
\$2.00; 1 year \$1.00; Sample dime.

American Rabbit Journal

Dept. S. Warrenton, Missouri

QUALITY

ITALIAN PACKAGE

Bees and Queens

Truck Shipments
For best prices write to

F. E. MORRISON

Rt. 2, Box 212-C, Auburn, Calif.

Johnson Dovetailing Equipment
for the beekeeper's shop.

Write for details.

Carl E. Johnson Company
1557 Gregory Avenue
Lincoln Park, Michigan



Reg. U.S.
Pat. Off.

BOOST YOUR INCOME

without adding more colonies or doing more work. By
actual test Starline Queens produce more honey than any
other stock tested. You owe it to yourself to give them a
trial.



Write For Prices

J. M. CUTTS & SONS

Box No. 336

Chipley, Florida

California Caucasians

Gentle and industrious Caucasian queens. NEW - Midnite Hybrid Caucasian queens. Ready to ship about April 10th. 10% books your order - Balance due two weeks prior to shipment. Air Mail.

Number of Queens	Regular	Midnite
1 to 24	\$1.40	\$1.70
25 to 99	1.30	1.60
100 and over	1.20	1.50

Quality and Service Doesn't Cost — IT PAYS

DON J. STRACHAN Yuba City, Calif.

R. 2, Box 83

Phone Sherwood 23881

Bright 3-banded Italian bees and queens.
Our bees are the very best you can buy.
Queens 3 lb. pkg./q. 3 lb. pkg./q.
1 to 50 ..\$1.25 \$4.25 \$5.25
50 up ..\$1.10 \$4.00 \$5.00

We guarantee safe delivery.
Packages F.O.B. - Queens Prepaid

TAYLOR APIARIES

P. O. Box 240, Luverne, Ala.

QUALITY ONLY

Italian Queens

for high production
Prompt Service

FRANK G. STEWART

Phone: Millville 548 Palo Cedro, Calif.

DADANT STARLINE HYBRIDS and

GARON'S 3-BANDED ITALIANS

Due to the unsettled conditions in the movement of
package bees by express because of the pending express rate
increase on this commodity, we find it necessary to await
further development before publishing our 1958 prices. Please
write for further information.

GARON BEE COMPANY

Donaldsonville, La.

QUALITY QUEENS MEAN INCREASED PRODUCTION

	1-9	10-49	50-over	
Express 2-lb. pkg. w/q	\$3.80	\$3.60	\$3.40	Parcel Post
3-lb. pkg. w/q	5.00	4.70	4.40	
Queens	1.20	1.10	1.00	

M. D. SAWYER — 206 Pershing Hwy. — Bunkie, La.

We Do Not Need Any More Package Orders For 1958

WE DO NEED

One or Two Good Men To Help Ship The Orders We Have Booked.

Weaver Apiaries

Navasota, Texas

If You Like Animals
You Will Love

PET-O-RAMA

FREE
COPY

Check Full Of
Pet News
PET-O-RAMA Dept. B
1370 E. 19 St.
Brooklyn-30-N.Y.

Starline Queens and
Package Bees for 1958

C. G. WENNER

Rt. 1, Box 320 — Glenn, Calif.

PACKAGE BEES and QUEENS

For Quality and Service
C. F. KOEHNEN & SONS
GLENN, CALIF.

CANADIAN BEE JOURNAL

Canadian beekeepers have much in common with their neighbors in the U.S. If you are interested in bee activities "North of the Border," send us your subscription NOW. Subscription price, \$1.75 per year in U.S.A.

Canadian Bee Journal

Streetsville, Ontario, Canada

Italian Package Bees and Queens For 1958

Truck loads a specialty. Nuclei made to order. Caucasian and Italian queens.

EUGENE WALKER

Route No. 2 — Box 892
Live Oak, Calif. — Phone 5584

Chrysler's Electric Welded All-Steel Queen Excluder



The only worthwhile Queen Excluder on the market

- Accurate spacing
- Allows maximum bee passage
- Better ventilation
- More honey production
- No wood. No Burr combs
- No sharp edges to injure bees
- So durably made that it is permanently queen excluding and will last a life time.

We manufacture a full line of Bee Supplies. Order from our dealers or direct from our factory. Canadian-made goods are cheaper. No duty. Send for our price list. Always in the market for Beeswax. Cash or trade.

W. A. CHRYSLER & SON
Chatham - Ontario - Canada

Package Bees and Queens

E. J. Bordelon Apiaries
Moreauville, La. Box 33
Phone 2583

Honey Bee Microslides - Worker Honey Bee, Set No. 3 whole mount of Worker and a series of eleven slides, showing the structure of each part of the insect.

With descriptive leaflet and box, \$5.25 per set. Free microslide price list on request. ESBE LABORATORY SUPPLIES, 459 Bloor Street, West, Toronto 4, Ont. Canada

Mr. Beekeeper:

Do you want bees that are easy to handle, build up fast, real honey getters and practically non-swarming? Then head your colonies with our light 3 band Italian queens. They are sure to please you. Now Booking Orders For 1958 Season. 10% deposit confirms any shipping date with balance due 10 days before shipment. Please let us know your needs now.

1958 PRICES

1 to 24	\$1.10 ea.	3 lb. package with queen
24 to 99	1.05 ea.	\$4.50 each
100 up	1.00 ea.	

Queen shipments start April 25. Package bees May 1st.

All queens shipped AIR MAIL prepaid. Packages F.O.B., Belton, S.C.

State health certificate with each shipment.

Dixie Honey Company, Belton, S. C.

HONEY WANTED

ALL GRADES. SEND SAMPLES. ADVISE QUANTITY AND PRICE.

EVERYTHING FOR THE BEEKEEPER

HONEY SALES CO. 2817 No. 2nd St. MINNEAPOLIS 11, MINN.

Package Bees and Queens "ITALIANS"



Booking Orders — Write For Circular and Price List

Quality Does Not Cost — It Pays

The Wilbanks Apiaries, Claxton, Ga.

DARK ITALIAN QUEENS

We are principally in honey production but are conforming to the request of our customers of the war years to supply our surplus queens again in 1958.

Whether it is one queen or several hundred you will be pleased with our queens and service.

1958 PRICES:

1-9 \$1.40 10-49 \$1.30 50-99 \$1.20 100 up \$1.10

Place your order now.

No package bees for 1958

LOUIS L. COUCH

The Village Beekeeper

Phone 2-5665

Pineville, La.

MASTER Electric Uncapping Knife.

Used by uncappers all over the world.
Your Dealer has them. Price \$15.00

HUTCHISON MFG. CO.

2904 Colorado Ave., Santa Monica, Calif.



—Crop and Market—

by M. G. Dadant

Retail Selling

Honey seems to be selling well on the retail markets. In fact our reports indicate that selling is going better than a year ago at this time. The whole East, most of the South and most of the Central West are well satisfied with retail sales, and California, with its increase in population, is having more and more demand as the population continues to increase. On the whole, we believe that retail demand has been better than a year ago, in spite of the generally mild and damp weather. There seems to be little tendency to cut prices, nor can there be much with an anticipated advance in the price of glass, either lately put into effect, or in the process of completion.

In the above areas there seems little doubt that local sales will dispose of what is left in the hands of the producers before the new crop materializes.

Packed Demand

At this level conditions are the opposite. There seems little inclination to accumulate much reserves in honey, possibly because the foreign situation has not tended to make a stabilized market. By that I mean that the anticipated foreign demand, especially in Germany, has not materialized. Possibly the amount of South American honey available has something to do with it, possibly the releasing of a quantity of honey by one of the co-operatives late in the summer tended to weaken the market, just as early release of California stocks years ago set the pace for the market to come. There is still hope that German and other demand may be released in mid January and have a settling effect on the market.

Jobbing Prices

Jobbing prices figured from general sales give us a price of about 14 cents on white in Eastern and Central areas, with some sales running as high as 15 and even 16 cents. As we work westward the f.o.b. price definitely weakens sometimes to as low as 12 cents, but with the general average at about 13 cents, so many producers are satisfied to hold for the present rather than sacrifice at figures which they assert are below the cost of production.

It is in the amber field, however, where the difficulty seems to be greatest. We have accustomed our consumers to a light honey, and the amount of amber this year, on account of the slow and mixed flows, makes for a larger total of amber than can be assimilated by the packer in making his blends. This, combined with the bareness of foreign demand, has made offers on amber honey not too remunerative. Also the amber grades necessarily meet the competition of southern countries even in the New York markets. Too, the white honey, producers are a little more inclined to "wait it out" rather than take a reduction in price.

Percent of Honey Out of Producers' Hands

Perhaps there is a little less honey out of the producers' hands than a year ago, especially in the heavy producing areas. In most of the East and South it would help if individual packers and producers would replenish their volume and keep the markets supplied rather than to run out of honey after Christmas and so either leave the market bare or allow it to be supplied by the more distant packers. Over 50 percent of all honey should by now be out of the producers' hands in spite of the very slow demand from packers, who, one of these days, will have to restock. In the East and in the South the percentages should run a good deal better.

Summary

It is our honest opinion that there has been a definite slackening by beekeepers in their efforts at publicity, starting in the fall and continuing until it was apparent that the whole crop was going to move. As an example compare the publicity this year with the magnificent efforts in the fall of 1955. Strange, when we have a short crop, we always seem to have a greater incentive to sell. With a better crop, we seem to have the attitude of "let George do it," even to the disadvantage of the "check-off plan," however, we are optimistic over the development of the market in the next two months.

Honey Wanted— Cars and less than car. Top Prices.
C. W. Aepler Co., Oconomowoc, Wis.

1957 Honey Crop Estimates

On October 9 the U.S. Crop Estimating Board issued their figures on the honey crop for 1957. California dropped from first to third place in production, her total for 1957 being 19½ million pounds as against 29 million pounds in 1956. Minnesota took first place with 20 million pounds as against 19 million last year. Florida was second with 19 million pounds, a gain of two million. Others in the first ten in order were Wisconsin, Iowa, Texas, New York, Michigan, Idaho, and Ohio with 14, 12.3, 11, 11, 9, 9, and 7 million pounds respectively.

The board estimates the crop this year as 235 million pounds or a gain of 10 per cent over 1956 but still below the big 1955 crop. It took somewhat over 4 million colonies to produce the crop or an average of 43.4 pounds. In mid-September 99 million pounds or about 42 per cent was still in the hands of the producers. For copies of the honey report write Crop Estimating Board, U. S. Dept. Agriculture, Washington, D. C.

Minnesota Rules and Regulations For Honey Grading, Inspection and Sanitation Laws

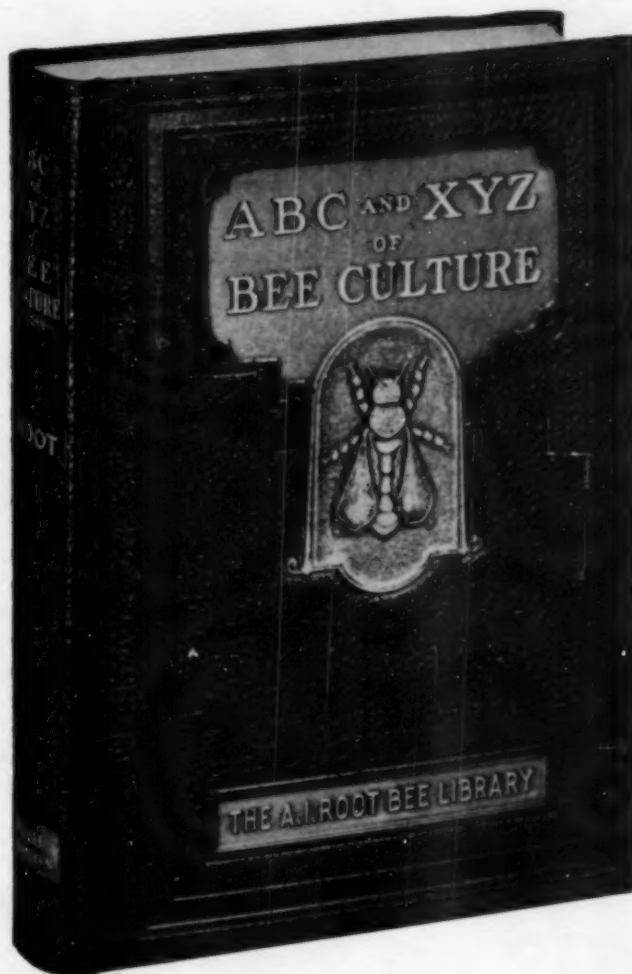
A pamphlet of sixteen pages from Byron G. Allen, Commissioner of the Department of Agriculture for Minnesota, Dairy and Food Branch. It gives complete information about standards and grades for honey, registration licenses, sale and movement of bees, inspection procedures, sanitary regulations, the latter with fifteen regulations.

Utah Figures

54,000 colonies produced an estimated 3,780,000 pounds of honey, 70 pounds to the colony a 4th higher than in 1956. U.S.D.A. figures show that Utah only had 51,000 colonies in 1956.

Glen Perrins
Ogden, Utah

UNIVERSITY MICROFILMS
300 NORTH ZEEB STREET
ANN ARBOR MICHIGAN
48106-1500



Ever Wonder About—

Royal jelly, breeding gentle bees that produce more honey, uses for beeswax, honey for babies, legal rights and responsibilities of beekeepers, honey for surgery, Biblical references to honey, bee behavior, honey for athletes, calories in honey?

It's All Here and More!

\$4.25 postpaid or \$5.65 with a one year subscription to Gleanings. Also ask your friendly Root Dealer about Starting Right with Bees, 500 Answers to Bee Questions, and Honey Plants Manual.

THE A. I. ROOT CO.

Factories at Medina, Ohio — Council Bluffs, Iowa — San Antonio, Texas

DISTRIBUTORS IN PRINCIPAL CITIES

Dealers Everywhere

Bee Books For Winter Reading

The Hive and the Honey Bee

by Roy A. Grout

652 pages of information covering all practical phases of beekeeping; life of bee; physical makeup, habits; and all phases of practical beekeeping. Standard textbook of more than 30 colleges and hundreds of 4-H classes. Co-authored by 15 authorities in their special lines, The Dadants, Cale, Abushady, Killion, Farrar, Hambleton, Lyle, Eckert, Pellett, Park, Snodgrass, Sturtevant, Milum, Wilson.

This book is a must for every beekeeper.

Cloth Postpaid \$4.00 Many Illustrations

First Lessons in Beekeeping

by Dadant

100 chock-full pages for the beginner in fine cloth cover. Completely Revised and up to date. A fine School textbook.

\$1.00 postpaid

Honey in the Comb

by Carl Killion

Methods and skills of the best comb-honey man in the business.

Cloth, 110 pages, \$3.00

Honey Plant Manual

H. B. Lovell

Glossary North American Plants. 64 pages \$1.00.

Bees Are My Business

by Harry Whitcomb

Big California beekeeper tells why and how he succeeded. A fine personal instructive book.

Cloth, 240 pages, \$3.75



Queen Rearing

by Laidlaw & Eckert

The best in queen rearing methods condensed into easily readable language. For the specialist or beginner.

Cloth, \$2.50

World of the Honeybee

by C. G. Butler

Britain's finest authority in his inimitable style, gives us results of his fine efforts.

Cloth, 225 pages, \$4.50

Dancing Bees

by K. von Frisch

Enticing explanations of how he found sense of direction in bees. How they locate nectar, etc.

Cloth, 190 pages, \$3.50

The Honey Cook Book

by Juliette Elkton

Fine new book—170 pages, 250 recipes. We recommend it.

Cloth, \$3.00

— Other Good Books for Your Library and Family —

R. L. Snodgrass—Anatomy of the Honeybee. New 330 pages	\$6.00	Snelgrove—Swarming. 100 pages	\$2.50
Mary G. Phillips—The Makers of Honey. Delightful New. Cloth	2.50	H. M. Fraser—Beekeeping in Antiquity. 150 pages ..	2.00
Lockhart—Bee Hunting. Paper50	More Favorite Honey Recipes25c
Beck & Smedley—Honey & Health—Best book on honey	3.00	Jay Smith—Better Queens. 100 pages	4.00
Ribbands—Behaviour and Social Life of Honey-bees. 325 pages	4.50	Pellett—A Living from Bees. Cloth, 330 pages	3.50
Old Favorite, Honey Recipes25c	Root—ABC & XYZ of Beekeeping. 600 pages, cloth ..	4.25
		Snelgrove—Queen Rearing. 346 pages, cloth	4.00
		Paisley—Betty the Bee (Children)50
		Hodges—Pollen Loads of The Honeybee. 150 pages ..	3.00

All above prices for clean new books Postpaid
2-Year (24 Numbers) Binder Only 75 Cents Postpaid

AMERICAN BEE JOURNAL

Hamilton, Illinois